Table of Exposure Rate Constants and Dose Equivalent Rate Constants

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TABLE OF EXPOSURE RATE CONSTANTS AND DOSE EQUIVALENT RATE CONSTANTS

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Abstract. The exposure rate constant Γ is calculated and tabulated for 1084 nuclides. The exposure rate constant is defined as the ratio of the product of the exposure rate and the square of the distance from a radioactive point source to the source strength Q.

The dose equivalent rate constant τ is here defined as the ratio of the mean dose equivalent rate to a water cylinder of 30 cm diameter and 100 cm height placed 100 cm from a radioactive source to the source strength Q. The source is placed at the mid-plane of the cylinder. The dimensions of the cylinder were chosen to approximate a human phantom of 70 kg mass. The dose equivalent rate constant is calculated and tabulated for 1084 nuclides. For both quantities, Γ and τ, the contributions from photon energies below 30 keV and X-rays are omitted.

(Continue on next page)

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The data are based on the Evaluated Nuclear Structure Data File, which is compiled by the Nuclear Data Group at Oak Ridge National Laboratory.

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1. INTRODUCTION

It is often convenient to know the exposure rate at a given distance from a radioactive source and the mean whole body dose equivalent rate to a person who is situated in the radiation field from the source.

The simulation of a human phantom is in this report made by a 30 cm diameter cylinder with a 100 cm height . The cylinder material is water which is approximately equivalent to human tissue regarding photon absorption and attenuation properties.

In this report the exposure rate and the mean dose equivalent rate to the above mentioned cylinder 1 m from the source is calculated for 1084 photon-emitting nuclides. The source geometry is that of a point source.

The contribution to these two quantities from photon energies below 30 keV and from X-rays are omitted because such low energy radiation has no practical importance when handling radioactive sources.

2. DEFINITION OF THE EXPOSURE RATE CONSTANT.

The exposure rate constant Γ is defined as the ratio of $\dot{X} \cdot d^2$ to Q, where $\dot{X}$ is the exposure rate at the distance d from a photon-emitting point source of strength Q

$$\Gamma = \dot{X} \cdot \frac{d^2}{Q} \qquad (1)$$

and then

$$\dot{X} = \Gamma \cdot \frac{Q}{d^2} \qquad (2)$$

If Γ is expressed in units of $R \cdot m^2/Ci \cdot h$, Γ is then the exposure rate in R/h at 1 m's distance from a point source with the source strength of 1 Ci.

3. CALCULATION OF THE EXPOSURE RATE CONSTANT

A general expression for the exposure rate in air is

$$\dot{X} = \phi \cdot \left(\frac{\mu en}{\rho}\right)_{air} \cdot E_\gamma \qquad (3)$$

where

ϕ = fluence rate

$\left(\frac{\mu en}{\rho}\right)_{air}$ = mass energy absorption coefficient in air

E_γ = photon energy

The fluence rate from a point isotropic source is calculated as:

$$\phi = \frac{Q}{4\pi d^2} \qquad (4)$$

which gives the exposure rate:

$$\dot{X} = \frac{Q}{4\pi d^2} \left(\frac{\mu en}{\rho}\right)_{air} \cdot E_\gamma \qquad (5)$$

Setting (2) equal to (5) gives an expression for the exposure rate constant Γ. Inserting E_γ in units of MeV/photon, $(\mu en/\rho)$air in cm^2/g gives Γ in $R \cdot m^2/Ci \cdot h$ if the following conversion factors are used:

1 MeV = $1.602\ 10^{-13}$ Joule

1 Joule = 10^5 rad·g

1 R = 0.869 rad in air

1 Ci = $3.7 \cdot 10^{10}$ disintegrations/sec

1 h = 3600 sec

1 cm^2 = $10^{-4} m^2$

For a radioactive source emitting n photons each of energy E_i and yield f_i the exposure rate constant is then given by:

$$\Gamma = \frac{1}{4\pi} \cdot 10^{-6} \cdot 1.602 \cdot 10^{-13} \cdot 10^{5} \cdot \frac{3.7 \cdot 10^{10} \cdot 3600}{0,869} \cdot \sum_{i=1}^{n} \left(\left(\frac{\mu en}{\rho} \right)_{air} \right)_i \cdot E_i \cdot f_i \qquad (6)$$

or

$$\Gamma = 15,54 \cdot \sum_{i=1}^{n} \left(\left(\frac{\mu en}{\rho} \right)_{air} \right)_i \cdot E_i \cdot f_i \qquad (7)$$

4. CALCULATION OF THE MEAN DOSE RATE TO A CYLINDER

The mean dose rate to a given cylinder from a photon-emitting point source of strength Q can be calculated as the dose rate at the source position from the cylinder, where the activity Q is homogeneously distributed in the cylinder (reciprocity theorem). This is shown in the following with reference to Figure 1.

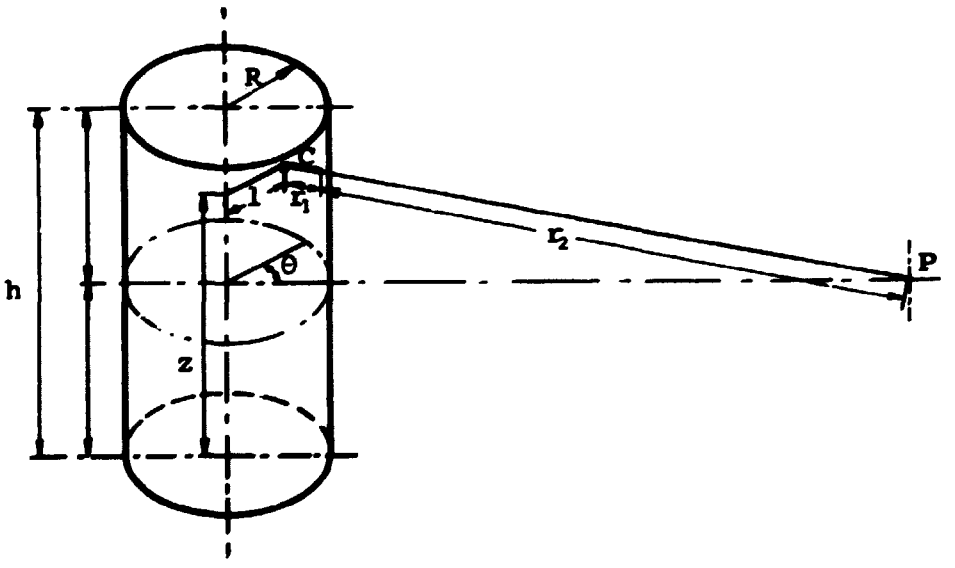

Figure 1. Geometry for calculating the dose rate at a point P from a cylindrical source and for calculating the mean dose rate to a cylinder from a point source.

A general expression for the dose rate $\dot{D}$ is

$$\dot{D} = \phi \left(\frac{\mu en}{\rho}\right) \cdot E_\gamma \qquad (8)$$

where

ϕ = fluence rate

$\frac{\mu en}{\rho}$ = mass energy absorption coefficient

E_γ = photon energy

4.1. Dose rate at a point from a cylindrical source.

The fluence rate at a point P from a cylindrical source of strength S_V is given by

$$\phi\,(P \leftarrow Cyl) = \frac{S_V}{4\pi} \int_V \frac{1}{(r_1+r_2)^2} \cdot B(E,\mu_1 r_1) \cdot e^{-\mu_1 r_1}\, dV \qquad (9)$$

and then the dose rate at the point P from the cylinder

$$D(P \leftarrow Cyl) = \left(\frac{\mu en}{\rho}\right)_{air} \cdot E_\gamma \cdot \frac{S_V}{4\pi} \int A\,dV \qquad (10)$$

where

$$A = \frac{1}{(r_1+r_2)^2} \cdot B(E,\mu_1 r_1) \cdot e^{-\mu_1 r_1}$$

μ_1 = total linear attenuation coefficient for cylinder material

$$S_V = \frac{Q}{\pi R^2 h}$$

B = dose build-up factor

4.2. Mean dose rate to a cylinder from a point source.

The fluence rate at a point C in the cylinder from a photon-emitting point source with the source strength Q placed at P is given by

$$\phi(C \leftarrow P) = \frac{Q}{4\pi(r_1+r_2)^2} \cdot B(E,\mu_1 r_1) \cdot e^{-\mu_1 r_1} \qquad (11)$$

which gives the dose rate at C

$$\dot{D}(C \leftarrow P) = \left(\frac{\mu en}{\rho}\right)_{water} \cdot E_\gamma \cdot \frac{Q}{\pi} \cdot A \qquad (12)$$

The mean dose rate in the cylinder is then given as

$$\bar{\dot{D}}\ (Cyl \leftarrow P) = \frac{1}{\pi R^2 h} \int_V \left(\frac{\mu en}{\rho}\right)_{water} \cdot E_\gamma \cdot \frac{Q}{4\pi} \cdot AdV \qquad (13)$$

Comparing (13) to (10) gives

$$\bar{\dot{D}}\ (Cyl \leftarrow P) = \left(\frac{\mu en}{\rho}\right)_{water} \cdot \left(\frac{\mu en}{\rho}\right)_{air}^{-1} \cdot \dot{D}(P \leftarrow Cyl) \qquad (14)$$

For a nuclide emitting N photons each of energy E_j and yield f_j the mean dose rate to a water filled cylinder from a point source of strength Q placed 1 m from the centerline and in the midplane of the cylinder is given by

$$\bar{\dot{D}}\ (Cyl \leftarrow P) = \frac{Q}{4\pi^2 R^2 h} \sum_{j=1}^{n} \left(\int_V AdV \right)_j \cdot E_j \cdot f_j \left(\left(\frac{\mu en}{\rho}\right)_{water} \right)_j \qquad (15)$$

the integral $\int_V AdV$ can be expressed as

$$\int_V AdV = 2 \cdot R \cdot G(k,p,\mu R) \qquad (16)$$

where

$$k = h/R$$
$$p = b/R$$

$G(k,p,\mu R)$ is given in ref. 1, but that expression does not include dose build-up. In this report G is calculated by numerical integration where dose build-up in the cylinder material is also considered. G is calculated from the equation:

$$G(k,p,\mu R) = \int_0^1 \int_0^\pi \int_0^k \frac{m \cdot dm \cdot d\theta \cdot dn \cdot B(E,\mu r')}{n^2+m^2+p^2-2mp\cos\theta} e^{-\mu r'} \qquad (17)$$

where

$$r' = R \cdot \frac{m^2 - mp\cdot\cos\theta + \sqrt{m^2+p^2-2mp\cdot\cos\theta - m^2n^2\sin^2\theta}}{m^2+p^2-2mp\cdot\cos\theta}$$

$$\cdot \sqrt{n^2+m^2+p^2-2mp\,\cos\theta}$$

$$m = \frac{l}{R}$$

$$n = \frac{z}{R}$$

$$p = \frac{b}{R}$$

Hence

$$\dot{\bar{D}}\ (\mathrm{Cyl} \leftarrow P) = \frac{Q}{4\pi^2 R^2 h} \cdot 2R \cdot \sum_{j=1}^{N} G_j(k,p,\mu R)\cdot f_j \cdot E_j \cdot \left(\left(\frac{\mu en}{\rho}\right)_{water}\right)_j \qquad (18)$$

Introducing the conversion factors mentioned in Section 3 gives

$$\frac{\dot{\bar{D}}}{Q}\ (\mathrm{Cyl} \leftarrow P) = 3.7\cdot 10^{10}\cdot 3600\cdot 1.602\cdot 10^{-13}\cdot 10^{5}\cdot$$

$$\frac{1}{2\pi^2}\cdot\frac{1}{R\cdot h}\cdot\sum_{j=1}^{N} G_j(k,p,\mu R)\cdot f_j\cdot E_j\left(\left(\frac{\mu en}{\rho}\right)_{water}\right)_j$$

$$= 1.08\cdot 10^{5}\cdot\frac{1}{R\cdot h}\cdot\sum_{j=1}^{N} G_j(k,p,\mu R)\cdot f_j\cdot E_j\left(\left(\frac{\mu en}{\rho}\right)_{water}\right)_j \qquad (19)$$

With the quality factor Q_f for gamma radiation equal 1, expressing R and h in units of cm, E_γ in units of MeV, and $(\mu en/\rho)_{water}$ in units of cm /g gives the dose equivalent rate constant T in units of rem/h·Ci.

$$T = \frac{\dot{\bar{D}}(\mathrm{Cyl} \leftarrow P)}{Q}\cdot Q_f \qquad (20)$$

5. DOSE BUILD-UP FACTORS

The dose build-up factors are calculated from Capo's formula (see ref. 2) for photon energies greater than 255 keV.

$$B(E,\mu R) = \sum_{i=0}^{3} \sum_{j=0}^{4} c_{ij} \cdot E^{-j} (\mu R)^{i} \qquad (21)$$

or

$$B(E,\mu R) = \sum_{i=0}^{3} \beta_i \, (\mu R)^{i} \qquad (22)$$

where

$$\beta_i = \sum_{j=0}^{4} c_{ij} \cdot E^{-j} \qquad (23)$$

The coefficients c_{ij} are tabulated in ref. 2 for different materials. In this report the figures for water are used.

For energies below or equal to 255 keV the Berger formula

$$B(E,\mu R) = 1 + C(E) \cdot (\mu R) \cdot e^{D(E) \cdot \mu R} \qquad (24)$$

is used.

Vrubel (see ref. 3) has given values for C and D in air in the energy range 20 keV - 6 MeV. As the build-up factors for water is nearly equal to those for air Vrubels data are used to calculate dose build-up in water. The data are fitted to a liniar polynomial of order 13 in E.

6. MASS ENERGY ABSORPTION COEFFICIENTS AND TOTAL LINEAR ATTENUATION COEFICIENT.

The values for $(\mu en/\rho)air$, $(\mu en/\rho)water$, and $(\mu/\rho)water$ are tabulated in ref. 4 for 27 photon energies in the range 10 kev to 10 MeV. Setting $\rho_{water} = 1\ g/cm^3$ gives the numerical value of μ_{water} to be equal to the numerical value of $(\mu/\rho)water$.

Logarithmic polynomials are fitted to the above mentioned values so that

$$\left(\frac{\mu en(E)}{\rho}\right)_{air} = 10^{\sum_{i=1}^{15} a_i (\log E)^i} \tag{25}$$

$$\left(\frac{\mu en(E)}{\rho}\right)_{water} = 10^{\sum_{j=1}^{15} a_j (\log E)^j} \tag{26}$$

$$\left(\frac{\mu(E)}{\rho}\right)_{water} = 10^{\sum_{k=1}^{13} a_k (\log E)^k} \tag{27}$$

The values for a_i, a_j, and a_k are calculated by a standard computer program. In Table 1, 2, and 3 the values for $(\mu en/\rho)air$ $(\mu en/\rho)water$, and $(\mu/\rho)water$ are given for a number of photon energies.

7. DATA

The calculations are based on data from the Evaluated Nuclear Structure Data File of the Oak Ridge Nuclear Data Project. This file contains radioactive decay data for nearly all nuclides. The computer program MEDLIST (see ref. 5), among other things, calculates the energies and intensities of the gamma radiation from each nuclide and tabulates them in order of increasing energy. A low intensity cutoff limit for the photon yields, 0.1 percent, is build into MEDLIST.

Fachinformationszentrum Energie, Physik, Mathematik GmbH, Fachabteilung III, Daten und Fakten in Karlsruhe continually updates the MEDLIST file from the latest ENSDF-tapes .

8. TABLES

In table 1, 2, and 3 the mass energy absorption coefficients for air, the mass energy absorption coefficient for water, and the mass attenuation coefficient for water are tabulated.

Table 4 gives the calculated values for the exposure rate constant Γ and the dose equivalent rate constant T for 1084 nuclides. The nuclide ^{137}Cs does not emit photons but decays to ^{137m}Ba. This nuclide emits photons with an energy of 661.645 keV and is given as 137Cs+137Ba m in the table. ^{226}Ra, decaying to ^{214}Pb and ^{214}Bi is given as 226 Ra + da., and the contributions from ^{214}Pb, ^{214}Bi and ^{226}Ra are included in Γ and T . Nuclides with a metastable phase are marked with a "m".

Table 4 is organized in the following way

Column 1. The mass number and the name of the nuclide.
- 2. The atomic number for the nuclide.
- 3. Half life $T_{\frac{1}{2}}$.
- 4. Photon energy E_i in keV.
- 5. Photon yield f_i in photons per disintegration.
- 6. Exposure rate constant Γ in $R \cdot m^2/Ci \cdot h$.
- 7. Dose equivalent rate constant T in $rem/Ci \cdot h$.

9. FINAL REMARKS

The tables in this report will be updated every fourth year with data based on the latest MEDLIST file from Fachinformationszentrum, Karlsruhe.

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4. Storm E. and Israel H.I. :Photon Cross Sections from 0.001 to 100 MeV for Elements 1 through 100. La-3753(1967).

5. A Handbook of Radioactivity Measurements Procedures. NCRP Report No. 58(1978).

TABLE 1

$\mu en/\rho$ for air as a function of energy

Energy	$\frac{\mu en}{\rho}$	Energy	$\frac{\mu en}{\rho}$	Energy	$\frac{\mu en}{\rho}$
keV	cm^2/g	keV	cm^2/g	keV	cm^2/g
10	4.5699	40	0.0611	70	0.0247
11	3.6775	41	0.0574	71	0.0245
12	2.7540	42	0.0541	72	0.0243
13	2.0653	43	0.0512	73	0.0241
14	1.5858	44	0.0485	74	0.0239
15	1.2505	45	0.0462	75	0.0238
16	1.0097	46	0.0440	76	0.0236
17	0.8309	47	0.0421	77	0.0235
18	0.6940	48	0.0404	78	0.0233
19	0.5864	49	0.0388	79	0.0232
20	0.5002	50	0.0374	80	0.0231
21	0.4298	51	0.0361	81	0.0230
22	0.3718	52	0.0349	82	0.0230
23	0.3234	53	0.0338	83	0.0229
24	0.2828	54	0.0329	84	0.0228
25	0.2485	55	0.0320	85	0.0228
26	0.2195	56	0.0312	86	0.0227
27	0.1947	57	0.0304	87	0.0227
28	0.1736	58	0.0297	88	0.0226
29	0.1554	59	0.0291	89	0.0226
30	0.1398	60	0.0285	90	0.0226
31	0.1263	61	0.0280	91	0.0226
32	0.1146	62	0.0275	92	0.0225
33	0.1045	63	0.0270	93	0.0225
34	0.0956	64	0.0266	94	0.0225
35	0.0879	65	0.0262	95	0.0225
36	0.0811	66	0.0259	96	0.0225
37	0.0751	67	0.0256	97	0.0225
38	0.0699	68	0.0253	98	0.0225
39	0.0652	69	0.0250	99	0.0226

TABLE 1 continued

μen/ρfor air as a function of energy

Energy	$\frac{\mu en}{\rho}$	Energy	$\frac{\mu en}{\rho}$	Energy	$\frac{\mu en}{\rho}$
keV	cm^2/g	keV	cm^2/g	keV	cm^2/g
100	0.0226	400	0.0294	700	0.0292
110	0.0228	410	0.0295	710	0.0292
120	0.0232	420	0.0295	720	0.0292
130	0.0237	430	0.0295	730	0.0291
40	0.0242	440	0.0296	740	0.0291
150	0.0247	450	0.0296	750	0.0290
160	0.0251	460	0.0296	760	0.0290
170	0.0256	470	0.0296	770	0.0289
180	0.0259	480	0.0296	780	0.0289
190	0.0263	490	0.0296	790	0.0289
200	0.0266	500	0.0296	800	0.0288
210	0.0269	510	0.0296	810	0.0288
220	0.0272	520	0.0296	820	0.0287
230	0.0275	530	0.0296	830	0.0287
240	0.0277	540	0.0296	840	0.0286
250	0.0279	550	0.0296	850	0.0286
260	0.0281	560	0.0295	860	0.0285
270	0.0282	570	0.0296	870	0.0285
280	0.0284	580	0.0296	880	0.0284
290	0.0285	590	0.0296	890	0.0284
300	0.0287	600	0.0295	900	0.0283
310	0.0288	610	0.0295	910	0.0283
320	0.0289	620	0.0295	920	0.0282
330	0.0290	630	0.0295	930	0.0282
340	0.0291	640	0.0294	940	0.0281
350	0.0291	650	0.0294	950	0.0281
360	0.0292	660	0.0294	960	0.0280
370	0.0293	670	0.0293	970	0.0280
380	0.0293	680	0.0293	980	0.0279
390	0.0294	690	0.0293	990	0.0279

TABLE 1 continued

μ_{en}/ρ for air as a function of energy

Energy	$\frac{\mu_{en}}{\rho}$	Energy	$\frac{\mu_{en}}{\rho}$	Energy	$\frac{\mu_{en}}{\rho}$
MeV	cm^2/g	MeV	cm^2/g	MeV	cm^2/g
1.0	0.0278	4.0	0.0187	7.0	0.0158
1.1	0.0273	4.1	0.0185	7.1	0.0158
1.2	0.0268	4.2	0.0184	7.2	0.0157
1.3	0.0263	4.3	0.0182	7.3	0.0157
1.4	0.0258	4.4	0.0181	7.4	0.0156
1.5	0.0253	4.5	0.0180	7.5	0.0156
1.6	0.0249	4.6	0.0178	7.6	0.0155
1.7	0.0245	4.7	0.0177	7.7	0.0155
1.8	0.0241	4.8	0.0176	7.8	0.0154
1.9	0.0237	4.9	0.0175	7.9	0.0154
2.0	0.0234	5.0	0.0174	8.0	0.0153
2.1	0.0230	5.1	0.0173	8.1	0.0153
2.2	0.0227	5.2	0.0172	8.2	0.0153
2.3	0.0224	5.3	0.0171	8.3	0.0152
2.4	0.0221	5.4	0.0170	8.4	0.0152
2.5	0.0218	5.5	0.0169	8.5	0.0151
2.6	0.0216	5.6	0.0168	8.6	0.0151
2.7	0.0213	5.7	0.0167	8.7	0.0150
2.8	0.0210	5.8	0.0166	8.8	0.0150
2.9	0.0208	5.9	0.0166	8.9	0.0150
3.0	0.0206	6.0	0.0165	9.0	0.0149
3.1	0.0204	6.1	0.0164	9.1	0.0149
3.2	0.0201	6.2	0.0163	9.2	0.0149
3.3	0.0199	6.3	0.0163	9.3	0.0148
3.4	0.0197	6.4	0.0162	9.4	0.0148
3.5	0.0195	6.5	0.0161	9.5	0.0147
3.6	0.0194	6.6	0.0161	9.6	0.0147
3.7	0.0192	6.7	0.0160	9.7	0.0147
3.8	0.0190	6.8	0.0160	9.8	0.0146
3.9	0.0188	6.9	0.0159	9.9	0.0146
10.0	0.0146				

TABLE 2

μ_{en}/ρ for water as a function of energy

Energy	$\frac{\mu_{en}}{\rho}$	Energy	$\frac{\mu_{en}}{\rho}$	Energy	$\frac{\mu_{en}}{\rho}$
keV	cm^2/g	keV	cm^2/g	keV	cm^2/g
10	4.7199	40	0.0616	70	0.0263
11	4.0855	41	0.0579	71	0.0261
12	3.0384	42	0.0547	72	0.0259
13	2.2213	43	0.0518	73	0.0257
14	1.6652	44	0.0492	74	0.0256
15	1.2904	45	0.0469	75	0.0254
16	1.0302	46	0.0448	76	0.0253
17	0.8423	47	0.0429	77	0.0252
18	0.7012	48	0.0412	78	0.0251
19	0.5917	49	0.0397	79	0.0250
20	0.5044	50	0.0383	80	0.0249
21	0.4334	51	0.0371	81	0.0248
22	0.3749	52	0.0359	82	0.0248
23	0.3262	53	0.0349	83	0.0247
24	0.2852	54	0.0339	84	0.0247
25	0.2506	55	0.0331	85	0.0246
26	0.2212	56	0.0323	86	0.0246
27	0.1961	57	0.0316	87	0.0246
28	0.1747	58	0.0309	88	0.0246
29	0.1564	59	0.0303	89	0.0246
30	0.1406	60	0.0298	90	0.0246
31	0.1270	61	0.0293	91	0.0246
32	0.1152	62	0.0288	92	0.0246
33	0.1050	63	0.0284	93	0.0246
34	0.0961	64	0.0280	94	0.0246
35	0.0883	65	0.0276	95	0.0246
36	0.0815	66	0.0273	96	0.0246
37	0.0756	67	0.0270	97	0.0246
38	0.0703	68	0.0267	98	0.0247
39	0.0657	69	0.0265	99	0.0247

TABLE 2 continued

μ_{en}/ρ for water as a function of energy

Energy	$\frac{\mu_{en}}{\rho}$	Energy	$\frac{\mu_{en}}{\rho}$	Energy	$\frac{\mu_{en}}{\rho}$
keV	cm^2/g	keV	cm^2/g	keV	cm^2/g
100	0.0247	400	0.0328	700	0.0325
110	0.0251	410	0.0328	710	0.0325
120	0.0256	420	0.0328	720	0.0324
130	0.0262	430	0.0329	730	0.0324
140	0.0268	440	0.0329	740	0.0323
150	0.0274	450	0.0329	750	0.0323
160	0.0279	460	0.0329	760	0.0322
170	0.0284	470	0.0330	770	0.0322
180	0.0288	480	0.0330	780	0.0321
190	0.0292	490	0.0330	790	0.0321
200	0.0296	500	0.0330	800	0.0320
210	0.0300	510	0.0330	810	0.0320
220	0.0303	520	0.0330	820	0.0319
230	0.0305	530	0.0330	830	0.0319
240	0.0308	540	0.0330	840	0.0318
250	0.0310	550	0.0329	850	0.0318
260	0.0312	560	0.0329	860	0.0317
270	0.0314	570	0.0329	870	0.0317
280	0.0316	580	0.0329	880	0.0316
290	0.0318	590	0.0329	890	0.0316
300	0.0319	600	0.0328	900	0.0315
310	0.0320	610	0.0328	910	0.0315
320	0.0321	620	0.0328	920	0.0314
330	0.0323	630	0.0328	930	0.0313
340	0.0324	640	0.0327	940	0.0313
350	0.0324	650	0.0327	950	0.0312
360	0.0325	660	0.0327	960	0.0312
370	0.0326	670	0.0326	970	0.0311
380	0.0327	680	0.0326	980	0.0311
390	0.0327	690	0.0325	990	0.0310

TABLE 2 continued

$\mu en/\rho$ for water as a function of energy

Energy	$\frac{\mu en}{\rho}$	Energy	$\frac{\mu en}{\rho}$	Energy	$\frac{\mu en}{\rho}$
MeV	cm^2/g	MeV	cm^2/g	MeV	cm^2/g
1.0	0.0310	4.0	0.0206	7.0	0.0173
1.1	0.0304	4.1	0.0205	7.1	0.0173
1.2	0.0298	4.2	0.0203	7.2	0.0172
1.3	0.0293	4.3	0.0202	7.3	0.0171
1.4	0.0287	4.4	0.0200	7.4	0.0171
1.5	0.0282	4.5	0.0199	7.5	0.0170
1.6	0.0277	4.6	0.0197	7.6	0.0169
1.7	0.0273	4.7	0.0196	7.7	0.0169
1.8	0.0268	4.8	0.0194	7.8	0.0168
1.9	0.0264	4.9	0.0193	7.9	0.0168
2.0	0.0260	5.0	0.0192	8.0	0.0167
2.1	0.0256	5.1	0.0191	8.1	0.0167
2.2	0.0252	5.2	0.0189	8.2	0.0166
2.3	0.0249	5.3	0.0188	8.3	0.0165
2.4	0.0245	5.4	0.0187	8.4	0.0165
2.5	0.0242	5.5	0.0186	8.5	0.0164
.6	0.0239	5.6	0.0185	8.6	0.0164
2.7	0.0236	5.7	0.0184	8.7	0.0163
2.8	0.0233	5.8	0.0183	8.8	0.0163
2.9	0.0230	5.9	0.0182	8.9	0.0163
3.0	0.0228	6.0	0.0181	9.0	0.0162
3.1	0.0225	6.1	0.0180	9.1	0.0162
3.2	0.0223	6.2	0.0179	9.2	0.0161
3.3	0.0220	6.3	0.0179	9.3	0.0161
3.4	0.0218	6.4	0.0178	9.4	0.0160
3.5	0.0216	6.5	0.0177	9.5	0.0160
3.6	0.0214	6.6	0.0176	9.6	0.0159
3.7	0.0212	6.7	0.0175	9.7	0.0159
3.8	0.0210	6.8	0.0175	9.8	0.0159
3.9	0.0208	6.9	0.0174	9.9	0.0158
10.0	0.0158				

TABLE 3

μ/ρ for water as a function of energy

Energy	$\frac{\mu}{\rho}$	Energy	$\frac{\mu}{\rho}$	Energy	$\frac{\mu}{\rho}$
keV	cm^2/g	keV	cm^2/g	keV	cm^2/g
10	4.8699	40	0.2330	70	0.1813
11	3.5989	41	0.2288	71	0.1806
12	2.7723	42	0.2250	72	0.1799
13	2.1917	43	0.2215	73	0.1792
14	1.7675	44	0.2183	74	0.1786
15	1.4504	45	0.2154	75	0.1779
16	1.2095	46	0.2127	76	0.1773
17	1.0242	47	0.2103	77	0.1767
18	0.8799	48	0.2080	78	0.1761
19	0.7662	49	0.2059	79	0.1755
20	0.6756	50	0.2039	80	0.1750
21	0.6026	51	0.2021	81	0.1744
22	0.5433	52	0.2004	82	0.1739
23	0.4946	53	0.1988	83	0.1733
24	0.4542	54	0.1973	84	0.1728
25	0.4205	55	0.1958	85	0.1723
26	0.3920	56	0.1945	86	0.1718
27	0.3679	57	0.1933	87	0.1713
28	0.3473	58	0.1921	88	0.1708
29	0.3296	59	0.1909	89	0.1703
30	0.3143	60	0.1899	90	0.1698
31	0.3009	61	0.1888	91	0.1694
32	0.2893	62	0.1878	92	0.1689
33	0.2791	63	0.1869	93	0.1684
34	0.2700	64	0.1860	94	0.1680
35	0.2620	65	0.1851	95	0.1675
36	0.2549	66	0.1843	96	0.1671
37	0.2485	67	0.1835	97	0.1666
38	0.2428	68	0.1827	98	0.1662
39	0.2377	69	0.1820	99	0.1657

TABLE 3 continued

μ/ρ for water as a function of energy

Energy	$\frac{\mu}{\rho}$	Energy	$\frac{\mu}{\rho}$	Energy	$\frac{\mu}{\rho}$
keV	cm^2/g	keV	cm^2/g	keV	cm^2/g
100	0.1653	400	0.1059	700	0.0836
110	0.1612	410	0.1049	710	0.0831
120	0.1575	420	0.1039	720	0.0825
130	0.1540	430	0.1029	730	0.0820
140	0.1508	440	0.1020	740	0.0815
150	0.1478	450	0.1011	750	0.0810
160	0.1449	460	0.1002	760	0.0805
170	0.1423	470	0.0993	770	0.0800
180	0.1398	480	0.0985	780	0.0795
190	0.1374	490	0.0976	790	0.0790
200	0.1352	500	0.0968	800	0.0786
210	0.1330	510	0.0960	810	0.0781
220	0.1310	520	0.0952	820	0.0777
230	0.1291	530	0.0945	830	0.0772
240	0.1273	540	0.0937	840	0.0768
250	0.1256	550	0.0930	850	0.0763
260	0.1239	560	0.0923	860	0.0759
270	0.1223	570	0.0916	870	0.0755
280	0.1207	580	0.0909	880	0.0751
290	0.1193	590	0.0902	890	0.0747
300	0.1178	600	0.0896	900	0.0743
310	0.1165	610	0.0889	910	0.0739
320	0.1151	620	0.0883	920	0.0735
330	0.1139	630	0.0877	930	0.0731
340	0.1126	640	0.0870	940	0.0727
350	0.1114	650	0.0864	950	0.0724
360	0.1102	660	0.0859	960	0.0720
370	0.1091	670	0.0853	970	0.0716
380	0.1080	680	0.0847	980	0.0713
390	0.1069	690	0.0841	990	0.0709

TABLE 3 continued

μ/ρ for water as a function of energy

Energy	$\frac{\mu}{\rho}$	Energy	$\frac{\mu}{\rho}$	Energy	$\frac{\mu}{\rho}$
MeV	cm^2/g	MeV	cm^2/g	MeV	cm^2/g
1.0	0.0706	4.0	0.0340	7.0	0.0257
1.1	0.0673	4.1	0.0336	7.1	0.0256
1.2	0.0644	4.2	0.0332	7.2	0.0254
1.3	0.0618	4.3	0.0328	7.3	0.0253
1.4	0.0595	4.4	0.0324	7.4	0.0251
1.5	0.0574	4.5	0.0320	7.5	0.0249
1.6	0.0555	4.6	0.0316	7.6	0.0248
1.7	0.0538	4.7	0.0313	7.7	0.0247
1.8	0.0522	4.8	0.0310	7.8	0.0245
1.9	0.0507	4.9	0.0306	7.9	0.0244
2.0	0.0493	5.0	0.0303	8.0	0.0242
2.1	0.0481	5.1	0.0300	8.1	0.0241
2.2	0.0469	5.2	0.0297	8.2	0.0240
2.3	0.0458	5.3	0.0294	8.3	0.0239
2.4	0.0447	5.4	0.0292	8.4	0.0237
2.5	0.0438	5.5	0.0289	8.5	0.0236
2.6	0.0428	5.6	0.0286	8.6	0.0235
2.7	0.0420	5.7	0.0284	8.7	0.0234
2.8	0.0412	5.8	0.0282	8.8	0.0233
2.9	0.0404	5.9	0.0279	8.9	0.0231
3.0	0.0397	6.0	0.0277	9.0	0.0230
3.1	0.0390	6.1	0.0275	9.1	0.0229
3.2	0.0383	6.2	0.0273	9.2	0.0228
3.3	0.0377	6.3	0.0271	9.3	0.0227
3.4	0.0371	6.4	0.0269	9.4	0.0226
3.5	0.0365	6.5	0.0267	9.5	0.0225
3.6	0.0360	6.6	0.0265	9.6	0.0224
3.7	0.0354	6.7	0.0263	9.7	0.0223
3.8	0.0349	6.8	0.0261	9.8	0.0222
3.9	0.0345	6.9	0.0259	9.9	0.0222
10.0	0.0221				

TABLE 4

EXPOSURE RATE CONSTANTS
AND
DOSE EQUIVALENT RATE CONSTANTS

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
7 Be	4	53.300 d	477.605	0.1034	0.0285	0.0222
9 Li	3	0.178 s	2429.000	0.3000	0.3118	0.2299
11 C	6	20.380 m	511.000	1.9952	0.5881	0.4485
13 B	5	0.017 s	596.000 3088.000 3684.000 8857.000	0.0012 0.0012 0.0750 0.0016	0.1099	0.0802
13 N	7	9.965 m	511.000	1.9964	0.5884	0.4488
13 O	8	0.009 s	511.000	1.9978	0.5888	0.4491
14 B	5	0.016 s	634.000 6093.000 6726.000	0.0020 0.8100 0.0800	1.7451	1.2860
14 O	8	1.177 m	511.000 2312.660	1.9975 0.9933	1.5867	1.1858
15 C	6	2.449 s	5297.900	0.6800	1.2032	0.8821
15 O	8	2.037 m	511.000	1.9977	0.5888	0.4491
16 N	7	7.120 s	1753.000 2741.000 6129.390 7117.000	0.0013 0.0076 0.6900 0.0500	1.4678	1.0818
17 N	7	4.169 s	870.800 2184.400	0.0334 0.0034	0.0195	0.0142
18 N	7	0.630 s	820.000 1650.000 1980.000 2470.000	0.6000 0.6300 1.0000 0.4300	2.1311	1.5716
18 F	9	1.829 h	511.000	2.0000	0.5895	0.4496
18 Ne	10	1.672 s	511.000 660.000 1041.300	2.0000 0.0015 0.0719	0.6305	0.4796
19 O	8	26.910 s	197.000 1356.000 1444.000 1550.000 2583.000 4179.000	0.9034 0.5030 0.0330 0.0220 0.0016 0.0014	0.4838	0.3759
19 Ne	10	17.220 s	511.000	2.0000	0.5895	0.4496
20 O	8	13.570 s	234.000 401.000	0.0200 0.0200	0.5665	0.4148

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
20 O	8	13.570 s	656.000	0.0320	0.5665	0.4148
			1057.000	0.9600		
20 F	9	11.000 s	1633.600	1.0000	0.7885	0.5830
20 Na	11	0.446 s	511.000	2.0066	1.2229	0.9179
			1634.000	0.7950		
			11261.000	0.0014		
21 F	9	4.320 s	350.500	0.6400	0.1897	0.1605
			1395.100	0.0050		
			1745.600	0.0710		
21 Na	11	22.550 s	350.500	0.0510	0.5990	0.4583
			511.000	1.9980		
21 Mg	12	0.123 s	331.900	0.5100	0.7432	0.5801
			511.000	1.9346		
			1384.000	0.1010		
			1716.000	0.0080		
22 F	9	4.230 s	1274.600	1.0000	2.4347	1.7948
			1900.000	0.0870		
			2082.600	0.8190		
			2166.100	0.6160		
			2283.900	0.0510		
			2987.700	0.0700		
			3983.500	0.0120		
			4247.900	0.0100		
			4366.100	0.1130		
22 Na	11	2.604 y	511.000	1.7980	1.1882	0.8881
			1274.540	0.9994		
22 Mg	12	3.857 s	74.000	0.6070	0.9844	0.7493
			511.000	1.9996		
			583.030	1.0000		
			1279.900	0.0580		
23 Ne	10	37.240 s	439.900	0.3300	0.0923	0.0736
			1636.500	0.0100		
			2076.400	0.0010		
23 Mg	12	11.360 s	439.900	0.0860	0.6108	0.4668
			511.000	1.9985		
24 Ne	10	3.380 m	472.300	1.0000	0.3107	0.2408
			874.350	0.0790		
24 Na	11	15.000 h	1368.530	1.0000	1.8266	1.3835
			2754.090	0.9986		
24 Al m	13	0.130 s	511.000	0.1400	0.0675	0.0508
			1368.000	0.0260		
			2868.000	0.0070		
24 Al	13	2.066 s	511.000	1.9881	3.6867	2.7275
			822.000	0.0060		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
24 Al	13	2.066 s	1078.000	0.1600	3.6867	2.7275
			1368.000	0.9640		
			1899.000	0.0060		
			2753.000	0.4300		
			2868.000	0.0140		
			3205.000	0.0360		
			3505.000	0.0230		
			3866.000	0.0560		
			4200.000	0.0440		
			4282.000	0.0030		
			4315.000	0.1500		
			4640.000	0.0360		
			5177.000	0.0100		
			5392.000	0.2000		
			6246.000	0.0070		
			7066.000	0.4100		
			7928.000	0.0140		
25 Ne	10	0.602 s	89.530	0.9550	0.1898	0.1527
			979.770	0.1810		
			1069.300	0.0230		
			1132.800	0.0040		
			2112.500	0.0062		
			2202.100	0.0110		
			3220.000	0.0053		
			3599.000	0.0022		
			3688.000	0.0096		
25 Na	11	59.600 s	389.660	0.1290	0.2284	0.1713
			585.060	0.1260		
			836.100	0.0011		
			974.710	0.1450		
			990.100	0.0015		
			1379.700	0.0026		
			1611.700	0.0950		
			1964.800	0.0016		
			2215.700	0.0010		
25 Al	13	7.230 s	511.000	1.9982	0.5955	0.4541
			1611.500	0.0084		
26 Na	11	1.087 s	1002.900	0.0080	1.0092	0.7461
			1129.700	0.0570		
			1383.100	0.0050		
			1394.000	0.0018		
			1412.300	0.0320		
			1791.200	0.0148		
			1808.650	0.9890		
			1896.700	0.0198		
			2133.000	0.0059		
			2172.100	0.0020		
			2509.800	0.0054		
			2523.300	0.0132		
			2541.000	0.0243		
			2776.900	0.0020		
			2938.240	0.0060		
			3026.000	0.0012		
			3091.400	0.0030		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
26 Na	11	1.087 s	4332.000	0.0015	1.0092	0.7461
			4835.000	0.0032		
26 Al m	13	6.347 s	511.000	1.9984	0.5890	0.4492
26 Al	13	716490.411 y	511.000	1.6360	1.3450	1.0061
			1129.670	0.0250		
			1808.650	0.9976		
			2938.240	0.0024		
26 Si	14	2.200 s	511.000	1.9998	0.7171	0.5427
			829.600	0.2180		
			1622.400	0.0290		
			1843.500	0.0040		
27 Na	11	0.304 s	984.700	0.8600	0.5765	0.4215
			1698.500	0.1400		
27 Mg	12	9.462 m	170.686	0.0080	0.4944	0.3600
			843.760	0.7180		
			1014.440	0.2800		
27 Si	14	4.170 s	511.000	1.9985	0.5908	0.4506
			2210.500	0.0018		
28 Na	11	0.030 s	1475.000	0.3000	0.3839	0.2833
			2380.000	0.1600		
28 Mg	12	20.910 h	30.640	0.6600	0.7617	0.5403
			400.690	0.3660		
			941.450	0.3830		
			1342.250	0.5260		
			1372.890	0.0470		
			1589.360	0.0420		
			1620.000	0.0030		
28 Al	13	2.240 m	1778.850	1.0000	0.8372	0.6195
28 P	15	0.270 s	511.000	1.9798	2.0064	1.4955
			1522.000	0.0060		
			1657.000	0.0050		
			1659.000	0.0100		
			1778.000	0.9550		
			2839.000	0.0190		
			3040.000	0.0300		
			4498.000	0.1100		
			6021.000	0.0190		
			6481.000	0.0040		
			6810.000	0.0340		
			7537.000	0.0850		
			7603.000	0.0073		
			7933.000	0.0190		
			8889.000	0.0012		
29 Al	13	6.520 m	754.900	0.0020	0.6937	0.5102
			1152.300	0.0080		
			1273.300	0.9110		
			2028.200	0.0340		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
29 Al	13	6.520 m	2425.600	0.0550	0.6937	0.5102
29 P	15	4.149 s	511.000	1.9978	0.5996	0.4570
			1273.300	0.0100		
			2425.600	0.0040		
30 Al	13	3.685 s	421.400	0.0010	1.4660	1.0778
			1040.000	0.0020		
			1263.100	0.3900		
			1311.500	0.0256		
			1331.900	0.0093		
			1733.000	0.0185		
			2235.300	0.6400		
			2574.000	0.0093		
			2595.100	0.0574		
			2995.900	0.0050		
			3498.300	0.3200		
			3769.600	0.0012		
			4809.700	0.0209		
30 P	15	2.499 m	511.000	1.9972	0.5886	0.4490
30 S	16	1.240 s	511.000	1.9976	0.9275	0.6965
			677.200	0.8010		
			709.000	0.0050		
			2341.400	0.0260		
31 S	16	2.605 s	511.000	2.0022	0.5983	0.4561
			1266.130	0.0125		
38 Cl m	17	0.716 s	671.270	0.9993	0.3840	0.2805
38 Cl	17	37.210 m	1642.420	0.3250	0.6799	0.5026
			2167.510	0.4400		
38 K m	19	0.929 s	511.000	2.0000	0.5895	0.4496
38 K	19	7.636 m	511.000	1.9835	1.5458	1.1563
			2167.000	0.9980		
			3936.000	0.0019		
39 Cl	17	55.600 m	250.000	0.4700	0.7343	0.5506
			986.000	0.0218		
			1091.000	0.0256		
			1236.000	0.0011		
			1267.200	0.5400		
			1312.000	0.0029		
			1517.000	0.3800		
			1562.000	0.0030		
39 Ca	20	0.876 s	511.000	2.0000	0.5895	0.4496
40 K	19	1.281E+09 y	1460.750	0.1070	0.0779	0.0575
41 Ar	18	1.827 h	1293.640	0.9916	0.6605	0.4857
42 K	19	12.360 h	312.750	0.0032	0.1350	0.0998
			1524.665	0.1790		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
42 Sc	21	0.684 s	511.000	2.0000	0.5895	0.4496
42 Sc m	21	1.022 m	439.000	1.0000	2.2327	1.6770
			511.000	2.0000		
			1226.800	1.0000		
			1524.200	1.0000		
43 K	19	22.600 h	184.000	0.0027	0.5549	0.4371
			220.608	0.0411		
			372.763	0.8730		
			396.870	0.1143		
			404.300	0.0011		
			593.400	0.1100		
			617.494	0.8050		
			800.800	0.0015		
			990.250	0.0033		
			1015.100	0.0016		
			1021.790	0.0188		
			1394.200	0.0010		
43 Sc m	21	0.632 s	151.700	0.9600	0.0704	0.0719
43 Sc	21	3.891 h	372.810	0.7500	0.6318	0.4990
			511.000	1.6020		
44 K	19	22.130 m	368.000	0.0200	1.0520	0.7729
			646.000	0.0014		
			651.000	0.0160		
			682.000	0.0060		
			726.000	0.0310		
			876.000	0.0160		
			891.000	0.0010		
			1019.000	0.0100		
			1025.000	0.0700		
			1050.000	0.0050		
			1126.000	0.0800		
			1156.000	0.5900		
			1244.000	0.0120		
			1499.000	0.0250		
			1702.000	0.0013		
			1777.000	0.0140		
			2145.000	0.0080		
			2151.000	0.2300		
			2504.000	0.0040		
			2519.000	0.0800		
			2619.000	0.0024		
			2656.000	0.0030		
			3201.000	0.0070		
			3251.000	0.0650		
			3302.000	0.0040		
			3395.000	0.0170		
			3660.000	0.0440		
			4865.000	0.0040		
			4383.000	0.0050		
			5025.000	0.0010		
			5309.000	0.0020		
44 Sc	21	3.927 h	511.000	1.8874	1.1756	0.8782

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
44 Sc	21	3.927 h	1157.002	0.9988	1.1756	0.8782
			1499.451	0.0091		
			2656.410	0.0011		
44 Sc m	21	2.442 d	271.241	0.8630	0.1536	0.1383
			1001.820	0.0137		
			1126.060	0.0137		
			1157.002	0.0137		
44 Ti	22	47.332 y	67.850	0.8770	0.0632	0.0674
			78.400	0.9470		
			147.000	0.0010		
45 Ar	18	21.000 s	474.400	0.0129	0.8839	0.6480
			549.100	0.0270		
			619.300	0.0233		
			1020.090	0.3230		
			1106.900	0.1150		
			1639.100	0.0860		
			1808.580	0.1290		
			2357.400	0.0750		
			3707.200	0.2610		
45 K	19	20.000 m	174.300	0.8000	0.8807	0.6677
			1260.700	0.0700		
			1435.000	0.0340		
			1705.600	0.6900		
			2354.200	0.1400		
			2598.800	0.0340		
45 Ti	22	3.080 h	511.000	1.7021	0.5023	0.3831
			719.600	0.0015		
46 Ar	18	8.000 s	1944.000	0.9000	0.8016	0.5932
46 K	19	1.783 m	1235.000	0.0640	1.2071	0.8867
			1345.000	1.0000		
			1675.000	0.0350		
			2060.000	0.0450		
			2285.000	0.0500		
			3710.000	0.0100		
			3735.000	0.2140		
			4075.000	0.0200		
			4520.000	0.0060		
			4950.000	0.0040		
			5280.000	0.0010		
46 Sc m	21	18.700 s	142.528	0.6200	0.0419	0.0435
46 Sc	21	83.830 d	889.250	0.9998	1.0912	0.7965
			1120.510	0.9999		
46 V m	23	1.000E-03 s	801.100	1.0000	0.4516	0.3281
46 V	23	0.422 s	511.000	1.9980	0.5889	0.4492
46 Cr	24	0.260 s	511.000	2.0000	0.5895	0.4496
47 K	19	17.500 s	564.700	0.1460	1.2468	0.9230

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
47 K	19	17.500 s	585.800	0.8500	1.2468	0.9230
			2013.100	1.0000		
47 Ca	20	4.536 d	489.230	0.0670	0.5513	0.4059
			530.400	0.0011		
			767.000	0.0020		
			807.860	0.0690		
			1297.090	0.7490		
47 Sc	21	3.351 d	159.381	0.6800	0.0532	0.0536
47 V	23	32.600 m	159.800	0.0011	0.5708	0.4354
			511.000	1.9309		
			1793.900	0.0019		
47 Cr	24	0.460 s	511.000	2.0000	0.5695	0.4496
48 K	19	6.900 s	671.220	0.0360	2.7084	1.9847
			675.230	0.1730		
			715.400	0.0140		
			753.300	0.0090		
			780.160	0.3190		
			793.110	0.0990		
			862.750	0.0440		
			866.500	0.0340		
			1300.900	0.0900		
			1315.650	0.1310		
			1525.380	0.0400		
			1537.840	0.1510		
			1633.600	0.0640		
			1783.100	0.0890		
			2031.300	0.0300		
			2073.700	0.0190		
			2177.500	0.0240		
			2283.000	0.0260		
			2388.130	0.1100		
			2788.900	0.1660		
			3062.990	0.0380		
			3831.530	0.8000		
			4507.200	0.0380		
			6613.700	0.1360		
			7300.900	0.0250		
48 Sc	21	1.821 d	175.357	0.0747	1.7803	1.3048
			983.501	1.0000		
			1037.500	0.9750		
			1212.849	0.0238		
			1312.087	1.0000		
48 V	23	16.238 d	511.000	0.9918	1.5560	1.1488
			803.230	0.0015		
			928.320	0.0077		
			944.101	0.0776		
			983.501	1.0000		
			1312.087	0.9750		
			1437.300	0.0012		
			2240.341	0.0241		
48 Cr	24	22.960 h	112.440	0.9900	0.2315	0.2241

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
48 Cr	24	22.960 h	308.330	1.0000	0.2315	0.2241
			511.000	0.0294		
49 Ca	20	8.716 m	856.100	0.0013	1.2478	0.9137
			1144.500	0.0011		
			1408.900	0.0063		
			2228.900	0.0019		
			2371.700	0.0049		
			3084.400	0.9200		
			4071.900	0.0700		
			4738.200	0.0021		
49 Cr	24	42.090 m	62.289	0.1670	0.5953	0.4686
			90.639	0.5420		
			152.928	0.3090		
			511.000	1.8502		
50 Ca	20	13.900 s	71.540	0.6000	0.9209	0.7076
			256.940	1.0000		
			1519.400	0.5800		
			1591.000	0.4200		
50 Sc m	21	0.350 s	256.940	0.8700	0.1227	0.1086
50 Sc	21	1.708 m	523.500	0.8800	1.6391	1.2120
			1121.030	1.0000		
			1553.710	1.0200		
50 Mn	25	0.283 s	511.000	2.0000	0.5895	0.4496
50 Mn m	25	1.750 m	511.000	2.1740	2.5762	1.9067
			661.500	0.2500		
			712.000	0.0050		
			783.300	1.0000		
			1098.000	1.0300		
			1282.400	0.3300		
			1443.300	0.6900		
			1793.500	0.0050		
			1944.500	0.0380		
			1993.400	0.0090		
			2016.900	0.0060		
			2404.400	0.0016		
			2540.800	0.0060		
			2811.500	0.0020		
			3115.200	0.0100		
51 Sc	21	12.400 s	331.200	0.0286	1.1342	0.8379
			386.700	0.0183		
			576.300	0.0335		
			706.600	0.0095		
			717.700	0.0710		
			775.600	0.0061		
			887.000	0.0084		
			907.200	0.0930		
			977.200	0.0063		
			1033.000	0.0026		
			1124.000	0.0140		
			1163.000	0.0033		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
51 Sc	21	12.400 s	1166.000	0.0064	1.1342	0.8379
			1253.800	0.0040		
			1293.800	0.0610		
			1351.800	0.0071		
			1437.300	0.5200		
			1474.400	0.0194		
			1481.900	0.0208		
			1567.500	0.1490		
			1625.000	0.0338		
			1750.000	0.0014		
			1800.000	0.0030		
			2051.100	0.0830		
			2144.100	0.3180		
			2181.500	0.0194		
			2619.000	0.0033		
			2691.000	0.0023		
			2738.000	0.0017		
			2919.000	0.0044		
51 Ti	22	5.760 m	320.076	0.9300	0.2074	0.1856
			608.550	0.0118		
			928.630	0.0690		
51 Cr	24	27.704 d	320.076	0.0983	0.0177	0.0166
51 Mn	25	46.200 m	511.000	1.9417	0.5734	0.4373
			749.070	0.0026		
51 Fe	26	0.270 s	511.000	2.0600	0.6072	0.4631
52 Ti	22	1.700 m	124.453	1.0000	0.0568	0.0605
52 V	23	3.750 m	1333.620	0.0059	0.7233	0.5334
			1434.060	1.0000		
			1530.670	0.0012		
52 Mn m	25	21.100 m	377.738	0.0168	1.2817	0.9601
			511.000	1.9343		
			1434.060	0.9830		
			1727.530	0.0022		
52 Mn	25	5.591 d	346.030	0.0098	1.8456	1.3571
			399.560	0.0018		
			502.050	0.0021		
			511.000	0.5880		
			600.180	0.0039		
			647.500	0.0040		
			744.214	0.9000		
			848.130	0.0332		
			935.520	0.9450		
			1246.246	0.0421		
			1247.850	0.0038		
			1333.615	0.0507		
			1434.056	1.0000		
52 Fe m	26	46.000 s	511.000	2.0000	1.9689	1.4589
			870.000	0.8000		
			929.000	0.8000		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
52 Fe m	26	46.000 s	1416.000	0.7600	1.9689	1.4589
			2286.000	0.0400		
52 Fe	26	8.275 h	168.684	0.9920	0.4172	0.3376
			377.738	0.0168		
			511.000	1.1200		
53 Ti	22	32.700 s	100.800	0.2030	0.9180	0.6975
			127.600	0.4600		
			228.400	0.3980		
			679.600	0.0400		
			1001.000	0.0440		
			1033.100	0.0250		
			1321.100	0.0600		
			1421.700	0.1070		
			1675.500	0.2500		
			1729.200	0.0480		
			1776.500	0.0410		
			1855.500	0.0320		
			1904.000	0.1230		
			1956.400	0.0350		
			2355.500	0.0310		
			2456.600	0.0530		
			2601.000	0.0620		
			2702.000	0.0290		
			2702.000	0.0100		
			2829.100	0.0200		
53 V	23	1.610 m	247.000	0.0018	0.5618	0.4106
			282.700	0.0076		
			442.700	0.0039		
			531.000	0.0018		
			563.600	0.0039		
			1006.000	0.8960		
			1289.100	0.1004		
53 Fe m	26	2.580 m	701.100	0.9860	1.5843	1.1605
			1011.500	0.8400		
			1328.100	0.8500		
			1712.600	0.0128		
			2339.600	0.1380		
53 Fe	26	8.510 m	377.900	0.4000	0.6694	0.5191
			511.000	1.9484		
			1619.900	0.0048		
			2273.500	0.0036		
			2748.800	0.0013		
54 V	23	49.800 s	563.680	0.0423	2.0156	1.4780
			626.600	0.0070		
			639.350	0.0360		
			646.270	0.0220		
			834.750	0.9710		
			923.290	0.0810		
			988.960	0.8010		
			1009.250	0.0140		
			1336.200	0.0250		
			1398.630	0.0460		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R²m2/h/Ci	T Rem/h/Ci
54 V	23	49.800 s	1463.510	0.0860	2.0156	1.4780
			1784.440	0.0820		
			1831.270	0.0480		
			1961.530	0.1000		
			1974.330	0.0450		
			2239.110	0.0130		
			2259.350	0.4560		
			2325.000	0.0220		
			2394.800	0.0300		
			2602.000	0.0270		
			2621.300	0.0290		
			2627.000	0.0160		
			2964.290	0.0350		
			3382.960	0.0400		
54 Mn	25	312.500 d	834.827	0.9998	0.4681	0.3402
54 Co	27	0.193 s	511.000	1.9800	0.5836	0.4451
54 Co m	27	1.480 m	411.000	1.0000	2.1324	1.6055
			511.000	1.9920		
			1130.000	1.0000		
			1407.000	1.0000		
55 Co	27	17.540 h	91.800	0.0270	1.0934	0.8166
			385.000	0.0050		
			411.000	0.0097		
			477.200	0.2030		
			511.000	1.4849		
			520.300	0.0100		
			803.800	0.0210		
			827.500	0.0031		
			931.500	0.7500		
			984.500	0.0050		
			1213.100	0.0032		
			1316.700	0.0710		
			1370.000	0.0300		
			1408.700	0.1650		
			2143.600	0.0011		
			2176.800	0.0028		
			2871.900	0.0012		
56 Cr	24	5.940 m	83.000	0.7100	0.0263	0.0289
56 Mn	25	2.579 h	846.754	0.9890	0.8580	0.6285
			1810.720	0.2720		
			2113.050	0.1430		
			2522.880	0.0099		
			2657.450	0.0065		
			2959.770	0.0031		
			3369.600	0.0017		
56 Co	27	78.760 d	511.000	0.3934	1.7694	1.3000
			733.630	0.0019		
			787.840	0.0031		
			846.752	0.9993		
			977.420	0.0140		
			996.900	0.0014		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
56 Co	27	78.760 d	1037.820	0.1409	1.7694	1.3000
			1140.320	0.0013		
			1175.090	0.0226		
			1238.260	0.6700		
			1335.510	0.0012		
			1360.210	0.0429		
			1442.690	0.0017		
			1771.400	0.1551		
			1810.660	0.0065		
			1963.790	0.0070		
			2015.350	0.0303		
			2034.910	0.0777		
			2113.330	0.0038		
			2213.010	0.0038		
			2276.080	0.0012		
			2598.550	0.1674		
			3009.670	0.0103		
			3202.240	0.0302		
			3253.520	0.0740		
			3273.200	0.0173		
			3451.420	0.0089		
			3548.140	0.0017		
56 Ni	28	6.100 d	158.380	0.9880	0.9426	0.7241
			269.500	0.3650		
			480.440	0.3650		
			749.950	0.4950		
			811.850	0.8600		
			1561.800	0.1400		
57 Mn	25	1.610 m	122.063	0.1040	0.0375	0.0304
			136.476	0.0143		
			230.250	0.0016		
			339.600	0.0013		
			352.320	0.0156		
			366.730	0.0030		
			569.930	0.0039		
			692.000	0.0410		
			706.420	0.0018		
			870.680	0.0019		
			992.680	0.0011		
			1260.540	0.0024		
			1612.820	0.0055		
			1725.180	0.0012		
57 Co	27	270.900 d	122.063	0.8559	0.0548	0.0583
			136.476	0.1061		
			692.000	0.0016		
57 Ni	28	1.503 d	127.190	0.1290	0.9799	0.7312
			511.000	0.8074		
			1046.400	0.0013		
			1377.590	0.7790		
			1757.480	0.0710		
			1919.430	0.1470		
			2803.900	0.0013		
58 Mn	25	1.088 m	459.160	0.2140	1.2296	0.9044

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
58 Mn	25	1.088 m	466.480	0.0127	1.2296	0.9044
			523.860	0.0370		
			632.710	0.0056		
			810.761	0.8800		
			863.940	0.1480		
			925.680	0.0168		
			1156.770	0.0105		
			1265.740	0.0910		
			1301.100	0.0069		
			1323.090	0.5940		
			1488.170	0.0016		
			1558.710	0.0051		
			1674.720	0.1160		
			1767.740	0.0318		
			1789.590	0.0287		
			2065.590	0.0016		
			2179.080	0.0048		
			2226.880	0.0030		
			2236.330	0.0034		
			2422.450	0.0112		
			2433.050	0.0012		
			2638.150	0.0133		
			2699.940	0.0011		
			2818.500	0.0085		
			3778.100	0.0015		
58 Co	27	70.800 d	511.000	0.3000	0.5495	0.4025
			810.757	0.9940		
			863.935	0.0068		
			1674.680	0.0052		
58 Cu	29	3.204 s	40.500	0.0480	0.8395	0.6336
			167.000	0.0091		
			511.000	2.0040		
			818.600	0.0011		
			855.000	0.0066		
			1321.300	0.0117		
			1448.100	0.1150		
			1454.300	0.1600		
			1488.400	0.0106		
			1584.200	0.0020		
			1810.000	0.0040		
			2902.500	0.0052		
			3038.500	0.0010		
			3264.500	0.0070		
			3595.000	0.0043		
59 Fe	26	44.529 d	142.648	0.0100	0.624:	0.4587
			192.344	0.0300		
			334.800	0.0027		
			1099.224	0.5610		
			1291.560	0.4360		
59 Cu	29	1.367 m	339.300	0.0802	0.8203	0.6229
			423.400	0.0252		
			465.000	0.0576		
			511.000	1.9974		
			538.600	0.0015		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
59 Cu	29	1.367 m	545.800	0.0022	0.8203	0.6229
			836.500	0.0219		
			1189.100	0.0037		
			1269.800	0.0021		
			1301.500	0.1460		
			1340.400	0.0140		
			1395.300	0.0032		
			1679.700	0.0023		
			1734.700	0.0117		
			1949.800	0.0012		
60 Co m	27	10.470 m	58.600	0.0207	0.0024	0.0019
			1330.000	0.0025		
60 Co	27	5.275 y	1173.210	0.9990	1.2987	0.9541
			1332.470	0.9998		
60 Cu	29	23.200 m	120.500	0.0019	1.9689	1.4645
			467.300	0.0352		
			497.900	0.0167		
			511.000	1.8525		
			643.200	0.0097		
			826.400	0.2170		
			839.200	0.0046		
			896.300	0.0013		
			909.200	0.0202		
			952.400	0.0273		
			965.200	0.0030		
			1035.200	0.0370		
			1110.500	0.0106		
			1173.200	0.0026		
			1234.200	0.0011		
			1293.700	0.0185		
			1307.100	0.0011		
			1332.500	0.8800		
			1420.100	0.0011		
			1451.400	0.0017		
			1791.600	0.4540		
			1861.600	0.0480		
			1919.700	0.0070		
			1936.900	0.0220		
			2061.000	0.0079		
			2158.900	0.0334		
			2263.600	0.0011		
			2389.600	0.0012		
			2403.300	0.0077		
			2675.300	0.0013		
			2687.900	0.0044		
			2746.100	0.0106		
			2986.300	0.0012		
			3124.100	0.0480		
			3160.800	0.0058		
			3194.100	0.0202		
			3269.400	0.0077		
			4020.400	0.0077		
60 Zn	30	2.380 m	62.000	0.1700	0.7996	0.6093

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
60 Zn	30	2.380 m	273.000	0.0750	0.7996	0.6093
			334.000	0.0650		
			365.000	0.0250		
			511.000	1.9320		
			669.000	0.5000		
			947.000	0.0080		
61 Fe	26	5.980 m	120.340	0.0530	0.7183	0.5364
			177.610	0.0201		
			297.900	0.2220		
			333.000	0.0022		
			349.700	0.0016		
			440.500	0.0022		
			618.400	0.0093		
			657.300	0.0022		
			686.000	0.0040		
			696.900	0.0011		
			748.100	0.0081		
			769.400	0.0016		
			806.300	0.0019		
			925.600	0.0034		
			945.400	0.0011		
			984.100	0.0061		
			989.200	0.0061		
			1027.420	0.4300		
			1097.800	0.0070		
			1205.070	0.4360		
			1275.000	0.0061		
			1285.700	0.0037		
			1381.400	0.0040		
			1403.900	0.0012		
			1538.800	0.0027		
			1618.900	0.0037		
			1645.950	0.0700		
			1659.300	0.0078		
			1837.200	0.0014		
			1879.400	0.0026		
			1889.000	0.0018		
			1999.800	0.0013		
			2011.600	0.0440		
			2177.100	0.0021		
			2230.800	0.0011		
			2484.400	0.0012		
			2754.400	0.0077		
61 Co	27	1.650 h	67.415	0.8600	0.0467	0.0429
			841.700	0.0059		
			909.200	0.0300		
61 Cu	29	3.408 h	67.370	0.0510	0.4672	0.3587
			283.000	0.1280		
			372.900	0.0202		
			511.000	1.2288		
			529.400	0.0041		
			588.600	0.0128		
			656.000	0.1010		
			816.800	0.0038		
			841.400	0.0024		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
61 Cu	29	3.408 h	908.800	0.0113	0.4672	0.3587
			1100.000	0.0031		
			1185.700	0.0400		
61 Zn	30	1.485 m	266.400	0.0042	0.8216	0.6224
			425.300	0.0017		
			475.200	0.1610		
			511.000	1.9707		
			690.400	0.0158		
			697.500	0.0031		
			751.400	0.0028		
			919.400	0.0011		
			934.300	0.0012		
			970.000	0.0244		
			1131.900	0.0017		
			1185.400	0.0160		
			1310.600	0.0093		
			1394.200	0.0109		
			1457.000	0.0030		
			1481.900	0.0079		
			1500.400	0.0013		
			1613.500	0.0030		
			1660.500	0.0740		
			1882.900	0.0041		
			1904.000	0.0011		
			1932.200	0.0056		
			1997.100	0.0115		
			2088.700	0.0067		
			2208.700	0.0083		
			2358.400	0.0031		
			2381.100	0.0013		
			2457.100	0.0070		
			2683.800	0.0075		
			2792.100	0.0083		
			2842.100	0.0022		
			2856.700	0.0036		
			2931.500	0.0013		
			3019.900	0.0019		
			3091.200	0.0010		
			3523.300	0.0013		
62 Fe	26	1.133 m	506.100	1.0000	0.2919	0.2232
62 Co	27	1.500 m	1128.900	0.1110	0.7929	0.5822
			1172.900	0.8380		
			1886.300	0.0040		
			1985.100	0.0160		
			2083.000	0.0030		
			2097.000	0.0090		
			2301.800	0.1470		
			2345.900	0.0130		
			3158.000	0.0080		
			3369.500	0.0030		
			4063.100	0.0030		
62 Co m	27	13.910 m	777.500	0.0180	1.3706	1.0067
			875.000	0.0130		
			1129.000	0.0110		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
62 Co m	27	13.910 m	1163.500	0.6810	1.3706	1.0067
			1172.900	0.9790		
			1718.600	0.0680		
			1753.500	0.0060		
			2003.700	0.1860		
			2104.600	0.0650		
			2301.900	0.0180		
			2882.300	0.0110		
			3271.100	0.0030		
62 Cu	29	9.740 m	511.000	1.9486	0.5771	0.4401
			875.710	0.0015		
			1173.020	0.0033		
62 Zn	30	9.260 h	40.850	0.2520	0.2552	0.1910
			243.360	0.0249		
			246.950	0.0188		
			260.430	0.0134		
			304.880	0.0029		
			349.600	0.0044		
			394.030	0.0221		
			507.600	0.1460		
			511.000	0.1680		
			548.350	0.1520		
			596.560	0.2570		
			637.410	0.0025		
62 Ga	31	0.116 s	511.000	2.0000	0.5895	0.4496
63 Co	27	27.400 s	87.130	0.4930	0.0575	0.0495
			155.600	0.0177		
			913.600	0.0046		
			981.700	0.0260		
			1069.100	0.0163		
			2174.500	0.0120		
63 Zn	30	38.100 m	449.930	0.0024	0.6221	0.4721
			511.000	1.8571		
			669.620	0.0840		
			962.060	0.0660		
			1123.720	0.0011		
			1412.080	0.0076		
			1547.040	0.0013		
63 Ga	31	32.400 s	193.000	0.0570	0.7775	0.5898
			248.000	0.0340		
			389.800	0.0038		
			415.000	0.0029		
			457.900	0.0060		
			511.000	1.9880		
			627.100	0.1020		
			637.000	0.1110		
			650.100	0.0490		
			768.500	0.0210		
			1054.600	0.0026		
			1065.200	0.0220		
			1147.000	0.0034		
			1203.400	0.0027		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
63 Ga	31	32.400 s	1395.400	0.0410	0.7775	0.5898
			1498.500	0.0032		
			1691.700	0.0300		
64 Cu	29	12.701 h	511.000	0.3574	0.1087	0.0828
			1345.900	0.0049		
64 Ga	31	2.630 m	511.000	2.0500	1.7887	1.3292
			756.520	0.0160		
			807.850	0.1400		
			918.780	0.0830		
			991.510	0.4600		
			1276.370	0.0690		
			1387.270	0.1400		
			1455.590	0.0190		
			1566.470	0.0430		
			1617.540	0.0170		
			1625.740	0.0140		
			1799.430	0.0460		
			1995.800	0.0290		
			2195.250	0.1100		
			2270.420	0.0230		
			2374.320	0.0780		
			2433.700	0.0060		
			2803.700	0.0070		
			3262.900	0.0030		
			3365.870	0.1700		
			3425.060	0.0500		
			3795.100	0.0100		
			4454.300	0.0090		
65 Ni	28	2.520 h	366.270	0.0461	0.2788	0.2066
			507.800	0.0029		
			609.300	0.0014		
			1115.530	0.1480		
			1481.840	0.2350		
			1623.420	0.0048		
			1724.920	0.0039		
65 Zn	30	243.900 d	511.000	0.0292	0.3105	0.2275
			1115.520	0.5075		
65 Ga	31	15.200 m	53.800	0.0490	0.6492	0.5046
			61.100	0.1160		
			115.100	0.5500		
			153.000	0.0900		
			206.900	0.0260		
			511.000	1.7800		
			560.100	0.0011		
			653.700	0.0076		
			659.900	0.0012		
			702.700	0.0011		
			714.800	0.0016		
			751.800	0.0820		
			768.900	0.0129		
			794.600	0.0027		
			813.000	0.0013		
			855.800	0.0018		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
65 Ga	31	15.200 m	866.800	0.0012	0.6492	0.5046
			909.700	0.0052		
			932.200	0.0180		
			1047.400	0.0091		
			1137.000	0.0015		
			1228.800	0.0073		
			1343.900	0.0022		
			1354.700	0.0080		
			1415.900	0.0023		
			2212.100	0.0014		
65 Ge	32	30.900 s	62.000	0.2700	1.0164	0.7673
			190.800	0.1030		
			459.100	0.0200		
			511.000	2.0000		
			587.700	0.0260		
			618.700	0.0150		
			649.700	0.3300		
			753.000	0.0129		
			809.100	0.2140		
			826.800	0.0036		
			884.900	0.0033		
			970.700	0.0023		
			1070.200	0.0092		
			1075.900	0.0082		
			1150.700	0.0013		
			1183.600	0.0046		
			1205.700	0.0122		
			1229.800	0.0220		
			1237.100	0.0125		
			1511.900	0.0033		
			1600.800	0.0069		
			1616.600	0.0073		
			1688.500	0.0220		
			1816.300	0.0040		
			1879.200	0.0096		
			1902.000	0.0040		
			2099.600	0.0148		
			2121.600	0.0033		
			2162.600	0.0053		
			2219.000	0.0023		
			2279.500	0.0033		
			2387.600	0.0036		
			2448.000	0.0139		
			2469.300	0.0033		
			2703.500	0.0020		
			2717.200	0.0033		
			2968.500	0.0049		
			3085.900	0.0023		
			3280.000	0.0030		
66 Cu	29	5.100 m	833.400	0.0018	0.0458	0.0335
			1039.200	0.0800		
66 Ga	31	9.400 h	448.900	0.0011	1.1574	0.8582
			511.000	1.1290		
			686.280	0.0026		
			833.560	0.0612		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
66 Ga	31	9.400 h	856.700	0.0012	1.1574	0.8582
			907.000	0.0012		
			1039.290	0.3840		
			1190.360	0.0013		
			1232.900	0.0054		
			1333.200	0.0125		
			1356.200	0.0038		
			1356.600	0.0013		
			1357.000	0.0019		
			1418.880	0.0065		
			1508.330	0.0058		
			1899.180	0.0043		
			1918.640	0.0217		
			2173.900	0.0012		
			2190.000	0.0576		
			2213.600	0.0014		
			2393.300	0.0025		
			2422.700	0.0197		
			2752.100	0.2350		
			2780.500	0.0013		
			2934.300	0.0022		
			3229.260	0.0151		
			3381.320	0.0143		
			3422.640	0.0083		
			3433.000	0.0028		
			3767.400	0.0014		
			3791.470	0.0102		
			4086.360	0.0115		
			4295.700	0.0353		
			4462.010	0.0072		
			4806.590	0.0149		
66 Ge	32	2.270 h	39.970	0.0036	0.3813	0.3062
			41.840	0.0014		
			42.830	0.0110		
			43.890	0.2860		
			53.400	0.0031		
			65.120	0.0710		
			71.620	0.0017		
			90.940	0.0039		
			96.340	0.0019		
			108.850	0.1040		
			125.170	0.0031		
			147.790	0.0130		
			154.740	0.0031		
			169.470	0.0017		
			182.030	0.0560		
			190.200	0.0560		
			225.900	0.0019		
			245.710	0.0530		
			272.970	0.1040		
			291.230	0.0025		
			302.520	0.0247		
			315.550	0.0081		
			323.800	0.0014		
			338.050	0.0860		
			381.850	0.2780		
			415.280	0.0042		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
66 Ge	32	2.270 h	427.830	0.0053	0.3813	0.3062
			470.620	0.0730		
			472.000	0.0320		
			492.630	0.0061		
			511.000	0.4989		
			536.740	0.0610		
			555.000	0.0011		
			597.140	0.0025		
			639.740	0.0058		
			662.190	0.0011		
			705.940	0.0420		
			757.310	0.0064		
			865.800	0.0025		
			919.400	0.0014		
			1101.260	0.0015		
			1165.800	0.0022		
			1174.740	0.0012		
			1221.880	0.0044		
			1322.540	0.0044		
			1412.540	0.0036		
			1490.430	0.0011		
			1507.800	0.0017		
			1512.870	0.0067		
67 Cu	29	2.578 d	91.266	0.0701	0.0573	0.0565
			93.315	0.1612		
			184.577	0.4870		
			208.951	0.0012		
			300.219	0.0080		
			393.529	0.0022		
67 Ga	31	3.261 d	91.266	0.0307	0.0788	0.0764
			93.311	0.3830		
			184.577	0.2090		
			208.951	0.0237		
			300.219	0.1680		
			393.529	0.0470		
			887.693	0.0015		
67 Ge	32	18.700 m	167.010	0.7700	0.8026	0.6231
			253.300	0.0030		
			359.500	0.0135		
			468.600	0.0012		
			511.000	2.0090		
			661.100	0.0028		
			728.200	0.0040		
			728.700	0.0220		
			811.800	0.0072		
			828.300	0.0270		
			898.500	0.0090		
			911.200	0.0280		
			914.800	0.0280		
			981.300	0.0103		
			1081.300	0.0094		
			1280.600	0.0035		
			1450.700	0.0060		
			1472.800	0.0450		
			1639.500	0.0058		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
67 Ge	32	18.700 m	1643.000	0.0081	0.8026	0.6231
			1809.400	0.0121		
			1976.200	0.0013		
			2526.600	0.0019		
			2563.600	0.0021		
			3058.300	0.0017		
			3162.800	0.0010		
			3401.500	0.0014		
68 Cu	29	31.000 s	151.800	0.0480	0.8023	0.5895
			498.600	0.0080		
			578.100	0.0136		
			587.300	0.0048		
			670.700	0.0048		
			670.720	0.0048		
			737.000	0.0080		
			805.300	0.0040		
			1007.000	0.0060		
			1041.000	0.0910		
			1077.400	0.7200		
			1142.400	0.0032		
			1260.900	0.1410		
			1291.800	0.0080		
			1340.300	0.1170		
			1386.000	0.0032		
			1433.400	0.0230		
			1531.500	0.0080		
			1540.000	0.0080		
			1676.100	0.0210		
			1744.700	0.0140		
			1883.200	0.0380		
			2108.100	0.0160		
			2340.300	0.0230		
68 Cu m	29	3.750 m	84.300	0.7700	0.3174	0.2523
			111.200	0.1790		
			525.900	0.8010		
			609.500	0.0110		
			636.600	0.0900		
68 Ga	31	68.000 m	511.000	1.7816	0.5455	0.4154
			1077.400	0.0330		
			1883.200	0.0014		
68 As	33	2.650 m	511.000	2.0740	1.6417	1.2220
			613.500	0.0550		
			651.200	0.2320		
			740.000	0.0240		
			762.600	0.2250		
			1016.500	0.6500		
			1253.400	0.0097		
			1263.500	0.0360		
			1333.500	0.0180		
			1412.500	0.1170		
			1622.000	0.0270		
			1634.000	0.0084		
			1643.000	0.0084		
			1778.700	0.2130		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
68 As	33	2.650 m	2008.000	0.0290	1.6417	1.2220
			2454.000	0.0260		
			2457.000	0.0260		
			2506.000	0.0097		
			3058.000	0.0071		
			3087.000	0.0110		
			3220.000	0.0052		
69 Cu	29	3.000 m	84.000	0.0040	0.1211	0.0888
			110.000	0.0020		
			173.000	0.0030		
			530.700	0.0300		
			595.200	0.0100		
			649.000	0.0140		
			834.000	0.0620		
			897.500	0.0030		
			992.000	0.0060		
			1006.500	0.1000		
			1179.500	0.0100		
			1428.000	0.0090		
			1497.000	0.0010		
			1825.000	0.0010		
69 Zn	30	13.760 h	438.634	0.9490	0.2394	0.1926
69 Ge	32	1.627 d	234.400	0.0044	0.4807	0.3590
			318.400	0.0131		
			511.000	0.6931		
			532.400	0.0021		
			553.100	0.0051		
			573.900	0.1110		
			587.100	0.0021		
			762.000	0.0019		
			787.700	0.0031		
			871.700	0.0980		
			1051.500	0.0033		
			1106.400	0.2570		
			1206.600	0.0023		
			1336.200	0.0290		
			1349.500	0.0023		
			1525.700	0.0015		
			1572.900	0.0012		
			1890.800	0.0026		
			2022.200	0.0033		
69 As	33	15.200 m	86.800	0.0330	0.5793	0.4441
			145.800	0.0240		
			232.700	0.0490		
			287.100	0.0090		
			374.100	0.0070		
			398.100	0.0059		
			511.000	1.9200		
69 Se	34	27.300 s	66.400	0.2600	0.6753	0.5244
			98.200	0.6000		
			511.000	2.0000		
			691.400	0.1300		
70 Cu	29	4.500 s	884.800	0.5400	0.2658	0.1933

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
70 Cu m	29	46.000 s	386.500	0.0800	1.5192	1.1119
			884.800	1.0000		
			901.700	0.8700		
			1108.700	0.0800		
			1251.700	0.5700		
			1271.000	0.0100		
			1428.000	0.0300		
			1476.500	0.0130		
			1520.000	0.0140		
			1690.600	0.0470		
			1953.500	0.0210		
			2061.400	0.0370		
			3062.000	0.0140		
70 Ga	31	21.150 m	176.170	0.0030	0.0041	0.0030
			1039.200	0.0068		
70 As	33	52.600 m	175.300	0.0260	2.1467	1.5919
			240.500	0.0021		
			252.300	0.0290		
			294.200	0.0019		
			298.800	0.0038		
			373.000	0.0123		
			448.000	0.0016		
			450.900	0.0011		
			492.200	0.0098		
			497.000	0.0253		
			511.000	1.7186		
			595.200	0.1630		
			607.600	0.0390		
			615.000	0.0400		
			653.000	0.0060		
			668.400	0.2120		
			686.000	0.0200		
			696.000	0.0163		
			744.800	0.2080		
			760.200	0.0025		
			828.100	0.0035		
			889.300	0.0310		
			893.100	0.0196		
			901.900	0.0139		
			905.700	0.1220		
			942.100	0.0139		
			953.800	0.0047		
			1040.000	0.8200		
			1099.300	0.0440		
			1114.300	0.2120		
			1118.100	0.0320		
			1218.300	0.0018		
			1250.000	0.0380		
			1296.100	0.0017		
			1332.200	0.0061		
			1336.000	0.0061		
			1339.400	0.0890		
			1351.800	0.0059		
			1412.500	0.0860		
			1418.300	0.0050		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
70 As	33	52.600 m	1496.100	0.0155	2.1467	1.5919
			1507.100	0.0039		
			1512.100	0.0028		
			1523.300	0.0510		
			1566.600	0.0028		
			1587.900	0.0044		
			1707.900	0.1790		
			1781.300	0.0390		
			1883.100	0.0051		
			1949.000	0.0016		
			2007.700	0.0290		
			2020.000	0.1670		
			2065.000	0.0012		
			2096.000	0.0018		
			2157.600	0.0037		
			2219.300	0.0011		
			2256.100	0.0013		
			2326.600	0.0011		
			2449.300	0.0035		
			2637.200	0.0030		
			3290.000	0.0018		
			3470.000	0.0015		
			3920.000	0.0016		
70 Se	34	41.000 m	32.050	0.0190	0.5705	0.4460
			39.590	0.0040		
			49.510	0.3540		
			86.250	0.0078		
			113.530	0.0156		
			129.490	0.0029		
			132.540	0.0348		
			135.630	0.0259		
			153.200	0.0043		
			160.790	0.0078		
			198.700	0.0017		
			202.730	0.0484		
			223.410	0.0063		
			244.140	0.0282		
			247.500	0.0043		
			255.860	0.0181		
			263.200	0.0274		
			290.200	0.0043		
			293.590	0.0279		
			297.100	0.0043		
			301.800	0.0035		
			312.600	0.0023		
			343.850	0.0066		
			376.650	0.0933		
			413.910	0.0207		
			426.150	0.2880		
			458.420	0.0026		
			499.700	0.0127		
			511.000	1.4092		
			545.910	0.0032		
			549.690	0.0029		
			561.560	0.0017		
			564.860	0.0017		
			858.700	0.0012		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
70 Se	34	41.000 m	1323.700	0.0035	0.5705	0.4460
			1570.500	0.0029		
			1618.800	0.0017		
71 Zn	30	2.400 m	121.500	0.0300	0.1722	0.1304
			389.900	0.0360		
			398.600	0.0060		
			453.000	0.0018		
			487.300	0.0012		
			511.600	0.3200		
			666.800	0.0090		
			721.400	0.0054		
			910.300	0.0784		
			964.800	0.0077		
			1109.300	0.0016		
			1120.000	0.0190		
			1631.600	0.0036		
			1904.400	0.0017		
71 Zn m	30	3.920 h	121.500	0.0290	0.8771	0.6805
			142.600	0.0550		
			386.300	0.9200		
			389.900	0.0260		
			453.000	0.0100		
			487.300	0.6200		
			511.600	0.2900		
			566.200	0.0019		
			574.900	0.0010		
			588.600	0.0050		
			596.000	0.2800		
			620.200	0.5600		
			753.400	0.0320		
			771.300	0.0200		
			910.000	0.0030		
			956.700	0.0019		
			964.600	0.0050		
			964.700	0.0420		
			974.700	0.0035		
			988.600	0.0120		
			1006.500	0.0070		
			1011.400	0.0067		
			1107.000	0.0070		
			1107.400	0.0200		
			1139.800	0.0020		
			1282.700	0.0027		
			1306.700	0.0010		
			1311.400	0.0010		
			1322.200	0.0023		
			1380.800	0.0036		
			1476.000	0.0060		
			1759.600	0.0090		
71 As	33	2.700 d	174.900	0.9100	0.3084	0.2525
			247.300	0.0013		
			279.200	0.0015		
			327.400	0.0276		
			350.000	0.0022		
			391.400	0.0056		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
71 As	33	2.700 d	500.000	0.0300	0.3084	0.2525
			503.900	0.0015		
			511.000	0.5743		
			526.700	0.0073		
			572.300	0.0017		
			615.400	0.0045		
			679.700	0.0023		
			708.200	0.0023		
			712.600	0.0028		
			747.200	0.0012		
			851.700	0.0018		
			920.700	0.0028		
			1026.800	0.0025		
			1033.800	0.0015		
			1037.700	0.0018		
			1095.700	0.0380		
			1139.500	0.0069		
			1212.700	0.0025		
			1298.800	0.0018		
71 Se	34	4.930 m	147.200	0.4740	0.8287	0.6333
			511.000	1.9060		
			724.100	0.0460		
			830.900	0.1260		
			871.100	0.0670		
			978.400	0.0240		
			1096.000	0.1020		
			1243.200	0.0610		
			1265.000	0.0170		
72 Zn	30	1.938 d	41.900	0.0083	0.0706	0.0723
			46.800	0.0058		
			79.400	0.0174		
			88.700	0.0216		
			102.800	0.0232		
			112.100	0.0207		
			144.700	0.8300		
			191.500	0.0938		
72 Ga	31	14.100 h	112.520	0.0011	1.3423	0.9842
			289.300	0.0017		
			336.300	0.0011		
			381.200	0.0027		
			428.300	0.0022		
			449.600	0.0015		
			479.100	0.0011		
			587.900	0.0011		
			600.850	0.0545		
			629.860	0.2520		
			691.200	0.0049		
			735.900	0.0037		
			786.400	0.0326		
			810.240	0.0201		
			834.020	0.9559		
			861.110	0.0092		
			894.220	0.0990		
			924.100	0.0014		
			939.400	0.0026		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
72 Ga	31	14.100 h	970.540	0.0109	1.3423	0.9842
			999.860	0.0080		
			1050.690	0.0688		
			1215.160	0.0078		
			1230.860	0.0146		
			1260.100	0.0110		
			1276.750	0.0156		
			1464.000	0.0354		
			1567.900	0.0020		
			1571.500	0.0080		
			1596.650	0.0430		
			1680.770	0.0099		
			1710.900	0.0041		
			1837.800	0.0023		
			1861.090	0.0526		
			1878.000	0.0023		
			1920.200	0.0014		
			1991.300	0.0011		
			2109.500	0.0107		
			2201.670	0.2560		
			2214.500	0.0015		
			2490.980	0.0793		
			2507.800	0.1270		
			2515.600	0.0024		
			2621.000	0.0014		
			2844.100	0.0048		
72 As	33	1.083 d	511.000	1.7513	0.9870	0.7367
			600.900	0.0032		
			629.930	0.0810		
			786.430	0.0043		
			834.000	0.7970		
			894.270	0.0079		
			1050.760	0.0098		
			1215.140	0.0023		
			1390.440	0.0024		
			1464.000	0.0114		
			1475.910	0.0050		
			1568.200	0.0014		
			1680.700	0.0012		
			1710.900	0.0027		
			1991.140	0.0038		
			2105.900	0.0074		
			2109.800	0.0022		
			2201.740	0.0052		
			2248.500	0.0033		
			2507.900	0.0033		
			2621.500	0.0039		
			2940.100	0.0033		
			2982.100	0.0019		
			3094.300	0.0014		
72 Br	35	1.300 m	75.000	0.0660	1.5801	1.1789
			379.900	0.0360		
			454.700	0.1330		
			511.000	1.9830		
			512.000	0.0210		
			537.600	0.0130		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
72 Br	35	1.300 m	559.300	0.0260	1.5801	1.1789
			710.200	0.0160		
			752.800	0.0300		
			774.800	0.0720		
			832.000	0.0210		
			862.000	0.7115		
			1014.000	0.0070		
			1054.700	0.0380		
			1061.600	0.0560		
			1089.200	0.0320		
			1125.100	0.0540		
			1136.400	0.0710		
			1227.300	0.0110		
			1269.500	0.0090		
			1316.700	0.1750		
			1349.900	0.0230		
			1433.600	0.0100		
			1509.800	0.0330		
			1571.300	0.0380		
			1648.500	0.0160		
			1724.000	0.0350		
			1807.400	0.0180		
			1909.400	0.0140		
			2150.700	0.0100		
			2371.900	0.0760		
			2432.700	0.0130		
72 Kr	36	17.400 s	147.000	0.0220	0.6647	0.5166
			162.600	0.0770		
			252.200	0.0330		
			310.000	0.1480		
			415.000	0.1920		
			511.000	1.9000		
			576.600	0.0630		
73 Ga	31	4.910 h	53.390	1.0000	0.2058	0.1874
			297.370	0.7740		
			325.740	0.1300		
			739.370	0.0430		
73 As	33	80.300 d	53.437	0.1050	0.0037	0.0031
73 Se m	34	39.000 m	67.000	0.0010	0.1368	0.1049
			84.500	0.0090		
			181.500	0.0014		
			254.300	0.0110		
			320.800	0.0041		
			393.600	0.0078		
			401.600	0.0061		
			510.000	0.0045		
			511.000	0.4257		
			571.200	0.0011		
			577.800	0.0046		
			850.500	0.0011		
			1078.100	0.0028		
73 Se	34	7.150 h	67.000	0.7730	0.6169	0.5015
			361.100	0.9660		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
73 Se	34	7.150 h	510.000	0.0110	0.6169	0.5015
			511.000	1.3044		
			865.400	0.0047		
			901.200	0.0012		
			1111.000	0.0017		
			1422.900	0.0011		
73 Kr	36	25.900 s	151.100	0.1260	0.7288	0.5779
			178.100	0.6620		
			213.600	0.0860		
			241.300	0.0730		
			303.600	0.0400		
			329.200	0.0460		
			391.900	0.0483		
			473.600	0.1060		
			511.000	1.9864		
74 Zn	30	1.583 m	50.300	0.1700	0.0950	0.0897
			53.100	0.0920		
			56.500	0.7400		
			86.100	0.0330		
			116.700	0.0350		
			140.000	0.3400		
			190.400	0.2400		
			347.300	0.0570		
74 Ga m	31	9.500 s	59.700	0.1000	0.0033	0.0032
74 Ga	31	8.100 m	233.200	0.0016	1.4640	1.0801
			258.800	0.0011		
			302.000	0.0011		
			471.100	0.0039		
			484.900	0.0107		
			493.000	0.0510		
			497.650	0.0101		
			504.700	0.0010		
			521.000	0.0012		
			540.900	0.0016		
			551.800	0.0011		
			595.880	0.9188		
			604.220	0.0294		
			608.400	0.1470		
			639.110	0.0083		
			701.500	0.0085		
			715.600	0.0022		
			734.000	0.0011		
			784.210	0.0071		
			809.800	0.0025		
			867.800	0.0891		
			886.720	0.0039		
			942.450	0.0129		
			960.980	0.0164		
			974.900	0.0028		
			993.550	0.0065		
			999.800	0.0031		
			1023.800	0.0013		
			1101.340	0.0544		
			1131.580	0.0085		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T R-m/h/Ci
74 Ga	31	8.100 m	1134.600	0.0039	1.4640	1.0801
			1160.360	0.0064		
			1177.500	0.0024		
			1184.600	0.0028		
			1204.290	0.0763		
			1293.500	0.0027		
			1312.820	0.0067		
			1332.200	0.0175		
			1337.190	0.0161		
			1357.900	0.0032		
			1443.380	0.0372		
			1471.500	0.0019		
			1478.200	0.0030		
			1489.350	0.0289		
			1510.200	0.0024		
			1570.340	0.0096		
			1602.000	0.0030		
			1676.620	0.0074		
			1744.820	0.0483		
			1806.400	0.0029		
			1829.590	0.0189		
			1940.640	0.0549		
			1970.800	0.0022		
			1999.250	0.0040		
			2004.700	0.0051		
			2014.440	0.0132		
			2024.050	0.0048		
			2036.200	0.0017		
			2074.100	0.0027		
			2097.920	0.0089		
			2131.800	0.0020		
			2138.600	0.0084		
			2197.900	0.0033		
			2198.000	0.0050		
			2231.900	0.0017		
			2257.050	0.0180		
			2279.000	0.0236		
			2353.530	0.4520		
			2362.430	0.0017		
			2438.480	0.0028		
			2504.300	0.0066		
			2580.070	0.0130		
			2616.680	0.0024		
			2690.950	0.0101		
			2737.900	0.0017		
			2747.130	0.0085		
			2771.800	0.0012		
			2785.930	0.0063		
			2790.780	0.0052		
			2970.900	0.0109		
			2997.400	0.0010		
			3030.300	0.0017		
			3031.640	0.0022		
			3211.100	0.0074		
			3232.320	0.0066		
			3298.930	0.0038		
			3354.020	0.0074		
			3605.350	0.0033		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
74 As	33	17.760 d	511.000	0.5820	0.3783	0.2836
			595.800	0.5920		
			608.390	0.0053		
			1204.340	0.0029		
74 As	33	17.780 d	634.780	0.1540	0.0567	0.0416
			635.000	0.0014		
74 Br	35	25.300 m	218.900	0.1760	2.0961	1.5562
			511.000	1.7844		
			615.100	0.0025		
			634.100	0.1520		
			634.800	0.6340		
			871.400	0.0025		
			936.400	0.0076		
			984.900	0.0406		
			1022.800	0.0520		
			1045.100	0.0051		
			1109.600	0.0057		
			1161.300	0.0019		
			1203.900	0.0152		
			1225.600	0.0127		
			1249.200	0.0019		
			1268.900	0.0680		
			1310.100	0.0051		
			1409.700	0.0063		
			1459.200	0.0101		
			1474.500	0.0108		
			1512.800	0.0190		
			1524.600	0.0032		
			1679.100	0.0082		
			1700.800	0.0082		
			1715.700	0.0127		
			1743.900	0.0133		
			1842.800	0.0228		
			1882.300	0.0152		
			1949.600	0.0152		
			1981.000	0.0133		
			2087.400	0.0130		
			2130.600	0.0285		
			2158.000	0.0032		
			2270.600	0.0178		
			2356.000	0.0076		
			2378.300	0.0032		
			2387.400	0.0044		
			2396.100	0.0279		
			2437.500	0.0070		
			2465.000	0.0095		
			2518.300	0.0057		
			2541.500	0.0032		
			2615.200	0.0730		
			2661.600	0.0520		
			2685.400	0.0025		
			2704.000	0.0152		
			2770.800	0.0203		
			2879.700	0.0044		
			2904.500	0.0165		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
74 Br	35	25.300 m	2934.200	0.0076	2.0961	1.5562
			2951.000	0.0063		
			2975.600	0.0152		
			2990.000	0.0032		
			3098.200	0.0044		
			3110.200	0.0032		
			3119.000	0.0095		
			3190.200	0.0095		
			3241.000	0.0063		
			3249.900	0.0610		
			3267.500	0.0051		
			3295.500	0.0273		
			3338.600	0.0044		
			3410.000	0.0038		
			3412.000	0.0070		
			3460.000	0.0120		
			3488.600	0.0038		
			3526.100	0.0063		
			3539.800	0.0063		
			3624.600	0.0552		
			3631.900	0.0254		
			3733.300	0.0178		
			3745.100	0.0063		
			3788.000	0.0399		
			3852.400	0.0127		
			3901.500	0.0139		
			3972.700	0.0228		
			4044.100	0.0082		
			4093.900	0.0051		
			4222.000	0.0044		
			4266.500	0.0108		
			4342.400	0.0133		
			4379.600	0.0410		
			4486.900	0.0019		
			4538.000	0.0013		
			4649.500	0.0038		
74 Br m	35	41.500 m	219.000	0.0500	2.0488	1.5200
			368.500	0.0016		
			511.000	1.8517		
			521.200	0.0064		
			615.200	0.0740		
			634.300	0.1750		
			634.800	0.9190		
			679.200	0.0064		
			724.900	0.0050		
			728.300	0.3500		
			744.600	0.0280		
			763.600	0.0023		
			777.600	0.0064		
			838.900	0.0550		
			850.500	0.0092		
			868.000	0.0074		
			979.500	0.0046		
			984.900	0.0340		
			986.500	0.0070		
			1022.700	0.0040		
			1044.700	0.0037		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
74 Br m	35	41.500 m	1080.100	0.0046	2.0488	1.5200
			1080.500	0.0046		
			1145.800	0.0051		
			1198.000	0.0037		
			1200.500	0.0530		
			1204.000	0.0046		
			1249.500	0.0700		
			1261.700	0.0060		
			1269.100	0.0810		
			1289.300	0.0046		
			1294.500	0.0190		
			1299.700	0.0021		
			1366.700	0.0230		
			1421.700	0.0064		
			1455.700	0.0180		
			1460.500	0.0083		
			1468.600	0.0055		
			1473.100	0.0147		
			1494.500	0.0040		
			1508.000	0.0022		
			1515.700	0.0027		
			1555.400	0.0032		
			1566.400	0.0033		
			1649.800	0.0036		
			1679.800	0.0074		
			1714.900	0.0600		
			1746.100	0.0013		
			1769.900	0.0016		
			1837.600	0.0083		
			1843.200	0.0092		
			1853.800	0.0046		
			1890.000	0.0074		
			1928.700	0.0064		
			1933.800	0.0046		
			1952.800	0.0032		
			1994.800	0.0046		
			2028.200	0.0046		
			2098.700	0.0046		
			2115.200	0.0036		
			2131.400	0.0076		
			2150.700	0.0074		
			2158.200	0.0046		
			2167.400	0.0064		
			2183.400	0.0101		
			2207.400	0.0055		
			2217.100	0.0046		
			2228.600	0.0027		
			2276.200	0.0064		
			2283.800	0.0280		
			2311.900	0.0340		
			2333.500	0.0083		
			2370.700	0.0069		
			2398.300	0.0110		
			2396.900	0.0014		
			2408.700	0.0090		
			2443.700	0.0037		
			2472.200	0.0074		
			2478.400	0.0037		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
74 Br m	35	41.500 m	2478.400	0.0018	2.0488	1.5200
			2485.600	0.0037		
			2502.300	0.0017		
			2558.000	0.0037		
			2661.900	0.0064		
			2679.800	0.0074		
			2695.500	0.0074		
			2701.800	0.0119		
			2708.500	0.0055		
			2745.700	0.0037		
			2754.500	0.0028		
			3040.400	0.0101		
			3137.100	0.0064		
			3153.300	0.0101		
			3173.100	0.0110		
			3227.500	0.0110		
			3297.700	0.0090		
			3323.200	0.0055		
			3336.300	0.0119		
			3393.800	0.0055		
			3430.800	0.0129		
			3625.000	0.0014		
			3684.600	0.0017		
			3786.700	0.0023		
			3806.600	0.0110		
			3861.600	0.0138		
			3881.500	0.0074		
			3951.500	0.0110		
			3957.600	0.0350		
			4027.000	0.0110		
			4064.400	0.0019		
			4123.500	0.0011		
			4200.400	0.0012		
			4380.400	0.0020		
74 Kr	36	11.500 m	62.800	0.1060	0.6622	0.5285
			67.400	0.0137		
			72.200	0.0025		
			79.900	0.0028		
			83.600	0.0012		
			89.700	0.0094		
			89.700	0.3120		
			93.800	0.0349		
			123.400	0.0940		
			132.600	0.0066		
			140.300	0.0910		
			149.700	0.0225		
			166.800	0.0034		
			179.100	0.0031		
			203.000	0.1950		
			212.800	0.0094		
			216.900	0.1020		
			225.100	0.0028		
			229.400	0.0025		
			233.900	0.0530		
			238.400	0.0016		
			296.700	0.1130		
			300.400	0.0097		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
74 Kr	36	11.500 m	306.500	0.1050	0.6622	0.5285
			311.100	0.0087		
			369.700	0.0031		
			373.600	0.0031		
			396.100	0.0084		
			444.800	0.0050		
			488.900	0.0025		
			511.000	1.7360		
			519.600	0.0050		
			530.500	0.0019		
			534.500	0.0031		
			536.000	0.0031		
			606.500	0.0025		
			609.100	0.0106		
			611.500	0.0019		
			618.900	0.0025		
			628.800	0.0025		
			691.500	0.0028		
			701.300	0.0172		
			738.800	0.0019		
			757.300	0.0059		
			765.900	0.0019		
			797.600	0.0022		
			831.900	0.0016		
			862.000	0.0012		
			879.500	0.0016		
			900.000	0.0022		
			969.600	0.0025		
			978.100	0.0016		
			1013.800	0.0022		
			1060.900	0.0022		
75 Ga	31	2.170 m	177.000	0.0061	0.0292	0.0232
			203.900	0.0030		
			252.800	0.0570		
			279.300	0.0017		
			310.400	0.0038		
			316.800	0.0019		
			321.600	0.0011		
			457.100	0.0026		
			568.500	0.0014		
			574.300	0.0180		
			632.200	0.0031		
			647.500	0.0010		
			783.200	0.0012		
			885.400	0.0063		
			927.200	0.0038		
			1043.300	0.0015		
			1248.500	0.0031		
			1501.100	0.0026		
75 Ge	32	1.380 h	65.600	0.0019	0.0188	0.0170
			199.200	0.0083		
			264.800	0.1110		
			418.600	0.0027		
			468.700	0.0020		
			617.800	0.0013		
75 Se	34	119.800 d	66.050	0.0110	0.2056	0.1945

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
75 Se	34	119.800 d	96.733	0.0350	0.2058	0.1945
			121.115	0.1770		
			136.000	0.6060		
			198.596	0.0150		
			264.651	0.5940		
			279.528	0.2520		
			303.910	0.0131		
			400.646	0.1135		
75 Br	35	1.633 h	112.100	0.0170	0.6906	0.5572
			141.190	0.0690		
			236.100	0.0083		
			286.500	0.9200		
			292.850	0.0280		
			299.400	0.0025		
			315.610	0.0063		
			319.700	0.0010		
			325.400	0.0025		
			349.200	0.0018		
			377.390	0.0410		
			427.790	0.0450		
			431.750	0.0400		
			460.900	0.0012		
			467.300	0.0013		
			484.400	0.0029		
			488.100	0.0018		
			490.700	0.0034		
			511.000	1.4594		
			534.800	0.0014		
			551.650	0.0031		
			566.430	0.0047		
			572.930	0.0210		
			586.100	0.0019		
			598.200	0.0034		
			608.900	0.0176		
			646.100	0.0016		
			652.200	0.0015		
			659.100	0.0037		
			663.800	0.0012		
			676.600	0.0012		
			701.600	0.0019		
			733.900	0.0160		
			770.800	0.0049		
			781.000	0.0011		
			788.700	0.0035		
			859.300	0.0025		
			890.700	0.0026		
			897.600	0.0052		
			912.100	0.0106		
			946.200	0.0015		
			952.100	0.0170		
			959.000	0.0028		
			961.400	0.0046		
			1074.200	0.0011		
			1144.500	0.0019		
			1245.500	0.0050		
			1380.500	0.0011		
			1448.900	0.0034		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R²m2/h/Ci	T Rem/h/Ci
75 Br	35	1.633 h	1515.800	0.0012	0.6906	0.5572
			1561.000	0.0013		
75 Kr	36	4.500 m	88.400	0.0330	0.6415	0.5093
			119.500	0.0178		
			132.500	0.7400		
			153.300	0.0620		
			154.700	0.2100		
			179.400	0.0028		
			216.400	0.0013		
			219.600	0.0030		
			220.900	0.0019		
			241.700	0.0133		
			273.100	0.0059		
			296.000	C.0027		
			352.500	0.0081		
			511.000	1.9260		
76 Ga	31	27.100 s	335.900	0.0530	1.2964	0.9592
			431.000	0.0920		
			545.510	0.2590		
			562.930	0.6580		
			661.400	0.0074		
			843.800	0.0114		
			847.150	0.0355		
			885.830	0.0132		
			911.400	0.0100		
			927.050	0.0092		
			976.500	0.0461		
			1014.200	0.0036		
			1043.600	0.0030		
			1051.700	0.0047		
			1108.410	0.1580		
			1175.700	0.0047		
			1182.100	0.0051		
			1208.020	0.0153		
			1249.100	0.0064		
			1259.900	0.0030		
			1273.050	0.0120		
			1310.600	0.0028		
			1348.130	0.0074		
			1358.900	0.0018		
			1443.900	0.0026		
			1461.200	0.0033		
			1482.500	0.0049		
			1489.600	0.0023		
			1502.300	0.0049		
			1546.000	0.0043		
			1583.900	0.0020		
			1612.700	0.0045		
			1634.000	0.0114		
			1639.300	0.0553		
			1642.800	0.0093		
			1660.300	0.0077		
			1721.900	0.0014		
			1732.700	0.0072		
			1811.100	0.0084		
			1878.300	0.0036		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
76 Ga	31	27.100 s	1892.700	0.0040	1.2964	0.9592
			1902.200	0.0042		
			1912.700	0.0059		
			1924.600	0.0020		
			1940.300	0.0068		
			1980.400	0.0022		
			2040.700	0.0033		
			2073.750	0.0423		
			2091.900	0.0018		
			2129.460	0.0220		
			2185.200	0.0049		
			2203.860	0.0137		
			2214.360	0.0223		
			2278.800	0.0044		
			2347.400	0.0043		
			2356.880	0.0246		
			2369.800	0.0028		
			2435.600	0.0037		
			2476.600	0.0022		
			2481.100	0.0020		
			2489.600	0.0020		
			2524.000	0.0080		
			2578.550	0.0224		
			2591.000	0.0027		
			2619.200	0.0224		
			2668.800	0.0016		
			2680.900	0.0032		
			2691.600	0.0015		
			2700.500	0.0020		
			2759.950	0.0110		
			2779.100	0.0080		
			2782.700	0.0101		
			2843.500	0.0159		
			2868.100	0.0035		
			2882.900	0.0014		
			2914.600	0.0074		
			2919.850	0.0910		
			2970.900	0.0039		
			2981.200	0.0020		
			3034.600	0.0052		
			3069.900	0.0092		
			3130.700	0.0021		
			3141.400	0.0421		
			3145.300	0.0030		
			3190.600	0.0021		
			3275.900	0.0058		
			3283.600	0.0017		
			3325.200	0.0011		
			3328.700	0.0020		
			3334.600	0.0019		
			3366.500	0.0015		
			3388.800	0.0283		
			3402.400	0.0013		
			3465.500	0.0014		
			3496.700	0.0011		
			3559.500	0.0059		
			3675.600	0.0045		
			3736.900	0.0016		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
76 Ga	31	27.100 s	3752.100	0.0016	1.2964	0.9592
			3913.300	0.0013		
			3925.200	0.0034		
			3951.700	0.0420		
			3994.300	0.0022		
			4121.800	0.0025		
			4253.300	0.0022		
76 As	33	1.097 d	559.100	0.4470	0.2349	0.1743
			563.230	0.0117		
			571.300	0.0014		
			657.030	0.0610		
			665.310	0.0039		
			740.120	0.0012		
			771.760	0.0012		
			867.630	0.0013		
			1129.870	0.0014		
			1212.720	0.0163		
			1216.020	0.0384		
			1228.520	0.0139		
			1439.130	0.0033		
			1453.600	0.0013		
			1787.670	0.0033		
			2096.330	0.0066		
			2110.790	0.0039		
76 Br	35	16.200 h	400.000	0.0010	1.3174	0.9811
			472.910	0.0189		
			489.700	0.0031		
			511.000	1.1427		
			559.110	0.7230		
			563.220	0.0282		
			571.700	0.0018		
			599.200	0.0025		
			604.400	0.0015		
			657.000	0.1550		
			665.100	0.0062		
			681.400	0.0041		
			695.800	0.0049		
			727.500	0.0085		
			730.400	0.0049		
			740.000	0.0010		
			771.800	0.0041		
			789.100	0.0047		
			803.500	0.0048		
			836.500	0.0044		
			867.500	0.0027		
			882.300	0.0040		
			886.100	0.0034		
			900.600	0.0012		
			942.300	0.0017		
			980.800	0.0030		
			1030.300	0.0061		
			1032.500	0.0061		
			1129.850	0.0434		
			1158.200	0.0015		
			1178.000	0.0012		
			1213.100	0.0116		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
76 Br	35	16.200 h	1216.100	0.0870	1.3174	0.9811
			1224.300	0.0017		
			1228.650	0.0202		
			1300.000	0.0014		
			1372.100	0.0049		
			1380.560	0.0241		
			1429.200	0.0023		
			1439.500	0.0055		
			1454.100	0.0083		
			1471.140	0.0231		
			1560.200	0.0043		
			1568.490	0.0087		
			1612.000	0.0022		
			1654.700	0.0012		
			1672.500	0.0017		
			1741.700	0.0012		
			1769.900	0.0023		
			1788.100	0.0050		
			1815.000	0.0015		
			1833.600	0.0028		
			1853.680	0.1400		
			1868.300	0.0014		
			1944.300	0.0038		
			1956.200	0.0024		
			2046.100	0.0017		
			2096.780	0.0128		
			2111.270	0.0231		
			2127.400	0.0014		
			2135.640	0.0085		
			2183.100	0.0014		
			2391.290	0.0450		
			2483.500	0.0011		
			2510.850	0.0180		
			2601.300	0.0067		
			2658.400	0.0017		
			2690.000	0.0035		
			2792.720	0.0530		
			2900.500	0.0036		
			2950.550	0.0760		
			2997.380	0.0095		
			3093.300	0.0016		
			3159.000	0.0014		
			3352.800	0.0025		
			3370.500	0.0010		
			3411.400	0.0029		
			3525.200	0.0018		
			3603.990	0.0158		
			3638.800	0.0017		
76 Kr	36	14.800 h	38.000	0.0013	0.2410	0.2103
			45.500	0.1810		
			76.300	0.0013		
			91.000	0.0022		
			96.600	0.0011		
			103.200	0.0370		
			113.400	0.0013		
			121.300	0.0020		
			134.800	0.0270		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
76 Kr	36	14.800 h	136.300	0.0107	0.2410	0.2103
			141.900	0.0020		
			150.500	0.0021		
			166.700	0.0017		
			171.000	0.0013		
			179.900	0.0017		
			199.800	0.0127		
			214.500	0.0032		
			232.500	0.0010		
			234.700	0.0014		
			239.000	0.0027		
			252.100	0.0670		
			270.300	0.2150		
			271.700	0.0470		
			294.900	0.0021		
			299.000	0.0094		
			300.200	0.0046		
			309.800	0.0250		
			315.700	0.4000		
			317.200	0.0047		
			355.300	0.0520		
			364.000	0.0056		
			406.500	0.1230		
			428.500	0.0017		
			438.600	0.0013		
			446.400	0.0042		
			452.000	0.0900		
			452.000	0.0050		
			473.100	0.0033		
			490.300	0.0021		
			499.800	0.0047		
			520.900	0.0020		
			543.600	0.0032		
			548.300	0.0013		
			552.600	0.0154		
			570.800	0.0013		
			575.900	0.0013		
			581.500	0.0047		
			582.500	0.0107		
			599.200	0.0020		
			619.500	0.0036		
			640.900	0.0020		
			666.000	0.0013		
			684.500	0.0016		
			731.100	0.0021		
			796.100	0.0031		
			822.600	0.0028		
			853.000	0.0015		
			868.200	0.0027		
			891.000	0.0013		
			898.200	0.0017		
			911.000	0.0013		
			936.000	0.0011		
			1002.000	0.0013		
			1030.300	0.0027		
			1070.300	0.0030		
76 Rb	37	36.800 s	64.000	0.0110	0.8829	0.6807

Nuclide	Z	Half Life	Energy keV	Yield	Γ R²m2/h/Ci	T Rem/h/Ci
76 Rb	37	36.800 s	244.000	0.0110	0.8829	0.6807
			254.000	0.0100		
			344.000	0.0620		
			354.000	0.1010		
			523.000	0.4800		
			453.000	0.0260		
			511.000	2.0320		
			612.000	0.0150		
			768.000	0.0180		
			800.000	0.0350		
			823.000	0.0110		
			869.000	0.0110		
			885.000	0.0440		
			919.000	0.0360		
			937.000	0.0120		
			974.000	0.0210		
			1173.000	0.0220		
			1219.000	0.0230		
77 Ge m	32	54.000 s	159.700	0.1134	0.0337	0.0318
			194.800	0.0050		
			215.500	0.2100		
			419.400	0.0010		
77 Ge	32	11.300 h	156.360	0.0081	0.5749	0.4604
			159.110	0.0023		
			177.280	0.0018		
			194.762	0.0179		
			208.980	0.0095		
			211.031	0.3110		
			215.505	0.2890		
			219.100	0.0015		
			254.740	0.0021		
			264.440	0.5440		
			268.100	0.0030		
			337.630	0.0023		
			338.660	0.0067		
			367.397	0.1410		
			416.328	0.2200		
			419.750	0.0124		
			439.438	0.0020		
			461.378	0.0128		
			475.433	0.0100		
			520.000	0.0030		
			558.018	0.1620		
			582.537	0.0079		
			614.390	0.0051		
			624.760	0.0018		
			631.823	0.0703		
			634.389	0.0210		
			673.000	0.0054		
			673.000	0.0013		
			698.538	0.0023		
			705.240	0.0011		
			712.350	0.0094		
			714.345	0.0721		
			743.649	0.0018		
			745.748	0.0097		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
77 Ge	32	11.300 h	749.861	0.0089	0.5749	0.4604
			766.715	0.0079		
			781.261	0.0102		
			784.770	0.0133		
			794.328	0.0028		
			810.352	0.0229		
			813.360	0.0013		
			823.130	0.0061		
			843.173	0.0021		
			875.191	0.0079		
			896.510	0.0012		
			900.970	0.0012		
			906.986	0.0096		
			913.805	0.0037		
			923.143	0.0070		
			925.473	0.0072		
			928.853	0.0105		
			939.350	0.0029		
			996.550	0.0011		
			1061.699	0.0015		
			1080.820	0.0024		
			1085.188	0.0610		
			1114.800	0.0010		
			1124.990	0.0012		
			1151.837	0.0020		
			1193.263	0.0259		
			1215.418	0.0013		
			1242.183	0.0040		
			1263.862	0.0086		
			1279.957	0.0017		
			1309.271	0.0049		
			1312.802	0.0036		
			1319.662	0.0030		
			1368.000	0.0340		
			1452.590	0.0012		
			1476.524	0.0024		
			1479.000	0.0013		
			1495.597	0.0050		
			1538.763	0.0014		
			1573.688	0.0066		
			1709.812	0.0031		
			1719.656	0.0040		
			1727.180	0.0015		
			1846.410	0.0017		
			2000.100	0.0057		
			2077.200	0.0024		
			2089.600	0.0024		
			2126.150	0.0021		
			2341.630	0.0048		
77 As	33	1.617 d	87.876	0.0021	0.0047	0.0040
			161.933	0.0013		
			238.999	0.0160		
			249.790	0.0043		
			520.652	0.0062		
77 Br m	35	4.280 m	106.200	0.1370	0.0064	0.0070
77 Br	35	2.333 d	87.800	0.0140	0.1757	0.1406

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
77 Br	35	2.333 d	138.950	0.0013	0.1757	0.1406
			161.830	0.0110		
			180.680	0.0028		
			200.400	0.0121		
			236.980	0.2310		
			249.770	0.0298		
			270.830	0.0032		
			281.650	0.0229		
			297.230	0.0416		
			303.760	0.0118		
			384.990	0.0084		
			439.470	0.0156		
			484.570	0.0100		
			511.000	0.0146		
			517.900	0.0016		
			520.690	0.2240		
			565.910	0.0043		
			567.900	0.0086		
			574.640	0.0119		
			578.910	0.0296		
			585.480	0.0157		
			755.350	0.0167		
			817.790	0.0208		
			1005.050	0.0092		
77 Kr	36	1.245 h	106.200	0.0126	0.5699	0.4598
			129.700	0.8730		
			146.500	0.4090		
			162.000	0.0022		
			276.200	0.0320		
			312.200	0.0358		
			511.000	1.5960		
			588.200	0.0012		
			606.000	0.0040		
			734.600	0.0038		
			837.000	0.0013		
			860.900	0.0017		
			1299.500	0.0028		
78 Ge	32	1.450 h	277.300	0.9600	0.1544	0.1455
			293.900	0.0403		
78 As	33	1.512 h	176.300	0.0012	0.5920	0.4357
			354.300	0.0190		
			545.400	0.0300		
			552.900	0.0030		
			613.600	0.5400		
			686.200	0.0200		
			695.400	0.1800		
			722.000	0.0019		
			786.200	0.0012		
			827.600	0.0750		
			842.400	0.0076		
			848.700	0.0017		
			884.600	0.0054		
			889.200	0.0100		
			1080.000	0.0190		
			1198.500	0.0050		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
78 As	33	1.512 h	1239.900	0.0580	0.5920	0.4357
			1308.800	0.1100		
			1339.300	0.0075		
			1382.100	0.0065		
			1435.900	0.0032		
			1475.900	0.0012		
			1530.000	0.0250		
			1714.300	0.0180		
			1720.000	0.0065		
			1738.600	0.0036		
			1894.700	0.0080		
			1924.100	0.0160		
			1995.500	0.0110		
			2068.900	0.0059		
			2095.300	0.0032		
			2226.100	0.0080		
			2613.400	0.0025		
			2616.800	0.0062		
			2629.300	0.0017		
			2682.500	0.0140		
			2798.500	0.0030		
			2839.200	0.0014		
78 Br m	35	1.192E-04 s	32.300	0.3850	0.0818	0.0633
			148.500	0.7700		
78 Br	35	6.460 m	511.000	1.8478	0.5926	0.4507
			613.630	0.1360		
79 Ge	32	42.000 s	230.400	0.2000	0.0630	0.0511
			542.500	0.1220		
79 As	33	9.010 m	95.500	0.0940	0.0138	0.0121
			364.500	0.0106		
			432.000	0.0085		
			446.800	0.0015		
			476.000	0.0020		
			715.100	0.0017		
			878.500	0.0080		
79 Kr	36	1.460 d	44.200	0.0021	0.1401	0.1124
			135.990	0.0100		
			180.210	0.0010		
			208.450	0.0078		
			217.020	0.0240		
			261.260	0.1270		
			299.510	0.0157		
			306.310	0.0260		
			344.700	0.0024		
			389.000	0.0152		
			397.560	0.0950		
			511.000	0.1421		
			522.980	0.0025		
			525.320	0.0043		
			606.070	0.0810		
			832.040	0.0126		
			934.810	0.0013		
			1025.700	0.0016		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
79 Kr	36	1.460 d	1115.100	0.0037	0.1401	0.1124
			1332.130	0.0044		
79 Rb	37	22.900 m	52.330	0.0031	0.7733	0.6000
			108.900	0.0015		
			130.010	0.1000		
			143.490	0.1120		
			147.230	0.0780		
			154.840	0.0590		
			160.680	0.0700		
			182.820	0.1620		
			200.720	0.0017		
			218.760	0.0120		
			303.170	0.0031		
			350.660	0.0680		
			383.890	0.0118		
			388.800	0.0019		
			397.650	0.0540		
			402.150	0.0053		
			417.100	0.0024		
			428.600	0.0055		
			461.490	0.0120		
			486.390	0.0029		
			505.300	0.1290		
			511.000	1.7140		
			524.400	0.0019		
			533.230	0.0135		
			540.970	0.0087		
			569.050	0.0113		
			603.190	0.0072		
			622.080	0.0710		
			643.600	0.0024		
			688.120	0.2410		
			774.400	0.0070		
			787.440	0.0022		
			915.850	0.0055		
			921.700	0.0036		
			934.690	0.0029		
			941.320	0.0017		
			1184.300	0.0022		
			1475.000	0.0012		
80 As	33	16.500 s	665.800	0.4180	0.2912	0.2136
			782.400	0.0079		
			811.300	0.0046		
			860.700	0.0071		
			1035.700	0.0038		
			1064.700	0.0013		
			1206.800	0.0420		
			1294.000	0.0096		
			1448.800	0.0100		
			1645.000	0.0650		
			1847.800	0.0092		
			1960.000	0.0038		
			2357.800	0.0088		
			2514.000	0.0017		
			2774.200	0.0029		
			2836.200	0.0025		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
80 Br	35	17.400 m	511.000	0.0520	0.0405	0.0302
			616.200	0.0663		
			639.400	0.0024		
			703.800	0.0020		
80 Br m	35	4.420 h	37.052	0.3900	0.0212	0.0088
			48.900	0.0032		
80 Rb	37	34.000 s	511.000	1.9600	0.7167	0.5428
			620.000	0.3900		
81 As	33	33.000 s	156.000	0.0017	0.0686	0.0527
			467.600	0.1232		
			491.000	0.0523		
			521.000	0.0090		
			756.000	0.0010		
			836.000	0.0020		
			938.900	0.0020		
			949.700	0.0022		
			1406.000	0.0060		
			1561.900	0.0023		
			2029.600	0.0014		
			2102.200	0.0023		
			2301.800	0.0017		
			2569.500	0.0010		
			2832.400	0.0017		
81 Se	34	18.500 m	275.900	0.0087	0.0051	0.0042
			290.000	0.0067		
			552.400	0.0010		
			566.000	0.0026		
			828.300	0.0032		
81 Se m	34	57.250 m	103.000	0.1260	0.0057	0.0063
81 Kr	36	210143.836 y	275.990	0.0200	0.0031	0.0029
81 Rb m	37	32.000 m	85.000	0.0500	0.0019	0.0021
81 Rb	37	4.580 h	190.000	0.6450	0.3459	0.2781
			244.200	0.0026		
			357.900	0.0066		
			389.200	0.0047		
			446.300	0.2286		
			456.800	0.0265		
			476.700	0.0050		
			499.700	0.0036		
			511.000	0.0250		
			511.000	0.6104		
			537.600	0.0226		
			549.000	0.0040		
			568.800	0.0053		
			608.200	0.0030		
			729.000	0.0028		
			803.400	0.0077		
			834.700	0.0076		
			977.000	0.0048		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
81 Rb	37	4.580 h	1041.000	0.0049	0.3459	0.2781
81 Sr	38	25.500 m	131.000	0.0010	0.7703	0.6057
			142.300	0.0400		
			147.800	0.3080		
			153.400	0.3650		
			172.000	0.0010		
			188.300	0.2090		
			206.400	0.0020		
			218.400	0.0010		
			237.000	0.0010		
			245.400	0.0080		
			255.000	0.0170		
			289.700	0.0010		
			290.000	0.0010		
			301.200	0.0200		
			386.500	0.0370		
			412.600	0.0010		
			421.000	0.0150		
			421.200	0.0150		
			443.500	0.1730		
			465.600	0.0090		
			477.000	0.0030		
			477.000	0.0020		
			496.500	0.0020		
			511.000	1.7116		
			517.000	0.0100		
			523.600	0.0090		
			549.200	0.0040		
			560.400	0.0010		
			574.500	0.0620		
			607.900	0.0130		
			632.000	0.0010		
			644.700	0.0040		
			701.500	0.0140		
			712.000	0.0130		
			721.300	0.0290		
			769.000	0.0010		
			809.000	0.0030		
			819.200	0.0010		
			851.600	0.0060		
			897.000	0.0020		
			909.300	0.0300		
			922.900	0.0040		
			938.600	0.0290		
			978.500	0.0040		
			1067.000	0.0020		
			1080.700	0.0040		
			1110.000	0.0020		
			1194.000	0.0050		
			1211.000	0.0030		
			1253.000	0.0030		
			1323.500	0.0020		
			1344.000	0.0010		
			1381.000	0.0040		
			1399.000	0.0050		
			1553.000	0.0050		
			1600.000	0.0010		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
82 As	33	13.000 s	343.500	0.7400	1.9205	1.4374
			560.500	0.2000		
			654.800	0.7700		
			815.500	0.1100		
			818.700	0.3000		
			902.700	0.0300		
			1076.200	0.0740		
			1080.400	0.2100		
			1541.000	0.1000		
			1718.000	0.0440		
			1731.400	0.2300		
			1896.000	0.4700		
			2355.500	0.0600		
			2514.300	0.0800		
			2605.300	0.1000		
			3149.500	0.0700		
82 As	33	21.000 s	185.700	0.0060	0.1889	0.1389
			654.800	0.1500		
			1076.200	0.0150		
			1080.400	0.0220		
			1731.400	0.0500		
			1971.000	0.0130		
			2590.100	0.0150		
			2834.000	0.0180		
			3666.000	0.0150		
82 Br m1	35	6.100 m	776.490	0.0020	0.0009	0.0006
82 Br m2	35	6.130 m	46.000	0.0024	0.0001	0.0001
82 Br	35	1.471 d	92.184	0.0072	1.4543	1.0679
			137.400	0.0014		
			221.450	0.0226		
			273.450	0.0080		
			554.320	0.7080		
			606.300	0.0117		
			619.070	0.4350		
			698.330	0.2850		
			776.490	0.8360		
			827.810	0.2404		
			952.100	0.0037		
			1007.370	0.0127		
			1043.970	0.2720		
			1081.400	0.0063		
			1317.470	0.2650		
			1426.000	0.0011		
			1474.820	0.1632		
			1650.300	0.0074		
			1779.600	0.0011		
82 Rb	37	1.300 m	511.000	1.9057	0.6247	0.4742
			698.330	0.0015		
			776.490	0.1340		
			1395.200	0.0050		
82 Rb m	37	6.200 h	92.184	0.0045	1.5987	1.1780

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
82 Rb m	37	6.200 h	183.200	0.0173	1.5987	1.1780
			221.450	0.0173		
			273.450	0.0069		
			308.500	0.0019		
			401.120	0.0029		
			455.100	0.0091		
			499.500	0.0021		
			511.000	0.4618		
			554.320	0.6300		
			606.300	0.0157		
			619.070	0.3700		
			698.330	0.2400		
			776.490	0.8260		
			827.810	0.2060		
			952.100	0.0066		
			1007.570	0.0690		
			1043.970	0.3300		
			1072.600	0.0091		
			1081.400	0.0124		
			1100.000	0.0033		
			1180.200	0.0017		
			1191.300	0.0025		
			1317.470	0.2560		
			1474.820	0.1730		
			1650.300	0.0132		
			1779.600	0.0026		
			1834.800	0.0013		
			1974.200	0.0012		
			2242.000	0.0019		
83 Se m	34	1.173 m	188.900	0.0017	0.4817	0.3586
			231.500	0.0033		
			356.660	0.1730		
			391.400	0.0010		
			510.040	0.0036		
			631.200	0.0047		
			673.880	0.1510		
			799.000	0.0123		
			987.900	0.1530		
			997.600	0.0128		
			1020.600	0.0197		
			1030.500	0.2090		
			1053.600	0.0149		
			1063.400	0.0339		
			1303.000	0.0093		
			1660.000	0.0178		
			1694.500	0.0074		
			1779.000	0.0071		
			2051.400	0.1100		
83 Se	34	22.500 m	208.300	0.0185	1.2759	0.9704
			225.160	0.3190		
			296.100	0.0027		
			340.200	0.0041		
			356.660	0.6860		
			371.600	0.0055		
			389.200	0.0062		
			442.400	0.0110		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R²m2/h/Ci	T Rem/h/Ci
83 Se	34	22.500 m	451.600	0.0082	1.2759	0.9704
			457.400	0.0350		
			472.700	0.0014		
			485.700	0.0226		
			510.040	0.4430		
			553.100	0.0430		
			571.900	0.0446		
			593.400	0.0075		
			609.200	0.0309		
			621.600	0.0041		
			664.800	0.0322		
			679.400	0.0110		
			706.100	0.0021		
			712.100	0.0268		
			718.000	0.1630		
			735.100	0.0082		
			799.000	0.1600		
			836.500	0.1590		
			866.600	0.0880		
			883.600	0.0780		
			887.800	0.0473		
			933.700	0.0069		
			943.300	0.0089		
			995.900	0.0130		
			1036.500	0.0021		
			1064.100	0.0590		
			1082.000	0.0268		
			1110.300	0.0041		
			1191.700	0.0418		
			1225.900	0.0123		
			1245.200	0.0069		
			1259.300	0.0089		
			1293.800	0.0160		
			1299.100	0.0580		
			1305.900	0.0055		
			1316.900	0.0410		
			1341.200	0.0570		
			1352.500	0.0480		
			1420.600	0.0110		
			1447.400	0.0048		
			1554.800	0.0254		
			1664.600	0.0055		
			1715.900	0.0062		
			1779.900	0.0190		
			1847.600	0.0069		
			1854.400	0.0151		
			1871.200	0.0144		
			1894.800	0.0780		
			2290.200	0.0930		
			2337.400	0.0343		
83 Br	35	2.390 h	529.500	0.0130	0.0040	0.0030
83 Rb	37	86.200 d	520.350	0.4610	0.2862	0.2163
			529.540	0.3000		
			552.500	0.1630		
			788.930	0.0070		
			798.400	0.0026		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
83 Sr	38	1.350 d	42.300	0.0157	0.4168	0.3166
			94.200	0.0041		
			160.000	0.0015		
			290.100	0.0053		
			381.600	0.0770		
			381.600	0.1190		
			389.400	0.0155		
			418.400	0.0500		
			423.700	0.0156		
			438.300	0.0090		
			511.000	0.4863		
			559.500	0.0019		
			565.000	0.0012		
			737.100	0.0021		
			759.100	0.0041		
			762.700	0.3000		
			778.500	0.0194		
			819.300	0.0083		
			848.400	0.0021		
			853.800	0.0013		
			890.000	0.0017		
			907.800	0.0033		
			916.900	0.0013		
			944.600	0.0015		
			1044.300	0.0036		
			1050.700	0.0010		
			1054.700	0.0021		
			1098.400	0.0026		
			1147.700	0.0123		
			1160.400	0.0153		
			1202.200	0.0017		
			1215.400	0.0023		
			1238.100	0.0022		
			1296.500	0.0014		
			1324.600	0.0025		
			1385.400	0.0010		
			1562.300	0.0196		
			1952.100	0.0086		
			2047.900	0.0011		
			2090.100	0.0014		
			2147.600	0.0018		
83 Y m	39	2.850 m	259.300	0.8800	0.7446	0.5882
			421.000	0.2640		
			511.000	1.8840		
83 Y	39	7.060 m	35.600	0.1360	0.6645	0.5024
			259.300	0.0196		
			391.200	0.0103		
			420.400	0.0091		
			454.300	0.0173		
			489.900	0.0530		
			494.300	0.0120		
			511.000	1.8924		
			618.300	0.0045		
			717.700	0.0082		
			721.200	0.0075		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
83 Y	39	7.060 m	858.800	0.0222	0.6645	0.5024
			882.100	0.0460		
			951.700	0.0133		
			1336.500	0.0234		
			1372.000	0.0063		
84 As	33	5.500 s	577.500	0.0370	0.7390	0.5440
			667.100	0.2100		
			1244.600	0.0320		
			1248.700	0.0130		
			1317.100	0.0170		
			1443.900	0.0240		
			1455.100	0.4900		
			1843.700	0.0340		
			2086.600	0.0470		
			2461.200	0.0400		
			2723.000	0.0088		
			3037.900	0.0150		
			3475.000	0.0080		
			4435.900	0.0100		
			4886.000	0.0040		
			4945.900	0.0140		
			5087.700	0.0090		
			5151.000	0.0100		
84 Se	34	3.250 m	408.200	1.0000	0.2410	0.1999
			498.500	0.0240		
84 Br m	35	6.000 m	424.000	1.0000	1.4622	1.0934
			447.000	0.0300		
			881.600	0.9800		
			1016.000	0.0100		
			1462.900	0.9700		
			1897.700	0.0200		
84 Br	35	31.790 m	230.200	0.0029	0.7977	0.5848
			354.700	0.0029		
			382.000	0.0057		
			604.800	0.0170		
			736.500	0.0127		
			802.200	0.0590		
			881.600	0.4100		
			947.500	0.0037		
			987.300	0.0078		
			1005.700	0.0045		
			1015.900	0.0610		
			1082.600	0.0014		
			1119.100	0.0014		
			1185.000	0.0011		
			1213.300	0.0250		
			1463.800	0.0190		
			1578.100	0.0066		
			1607.600	0.0039		
			1741.200	0.0160		
			1818.700	0.0024		
			1877.500	0.0111		
			1897.600	0.1450		
			2029.600	0.0200		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
84 Br	35	31.790 m	2094.200	0.0020	0.7977	0.5848
			2200.700	0.0115		
			2484.100	0.0660		
			2593.700	0.0014		
			2622.900	0.0030		
			2758.700	0.0049		
			2824.100	0.0111		
			2988.700	0.0016		
			3045.400	0.0250		
			3202.100	0.0020		
			3235.300	0.0200		
			3365.800	0.0280		
			3927.500	0.0670		
			4084.600	0.0029		
84 Kr	36	1.840E-06 s	881.000	1.1200	1.6980	1.2411
			1078.000	0.9200		
			1214.000	0.9700		
84 Rb m	37	20.490 m	216.100	0.3400	0.2073	0.1774
			248.240	0.6300		
			464.300	0.3100		
84 Rb	37	32.870 d	511.000	0.5172	0.4945	0.3651
			881.460	0.6790		
			1015.900	0.0041		
			1897.000	0.0075		
84 Y	39	4.600 s	511.000	1.9800	0.7402	0.5589
			793.000	0.3500		
84 Y	39	40.200 m	288.300	0.0078	2.0582	1.5215
			462.800	0.0940		
			511.000	1.7720		
			602.200	0.0880		
			660.700	0.1460		
			680.600	0.0410		
			703.600	0.0430		
			793.100	0.9800		
			974.400	0.7400		
			994.200	0.0410		
			1039.800	0.4520		
			1092.300	0.0440		
			1110.300	0.0320		
			1144.300	0.0300		
			1255.000	0.0588		
			1262.700	0.0245		
			1453.400	0.0200		
			1502.800	0.0640		
			1614.500	0.0176		
			1654.600	0.0255		
			1744.400	0.0225		
			1763.600	0.0196		
			1810.800	0.0090		
			2006.700	0.0029		
			2295.300	0.0220		
84 Nb	41	12.000 s	511.000	2.0000	0.9956	0.7528

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
84 Nb	41	12.000 s	540.000	1.0000	0.9956	0.7528
			722.800	0.2300		
85 As	33	2.050 s	577.500	0.0098	0.1619	0.1193
			667.100	0.0690		
			1244.600	0.0065		
			1455.100	0.1630		
			1843.700	0.0113		
85 Se	34	2.900 m	345.100	0.4570	0.9806	0.7353
			432.800	0.0270		
			597.400	0.0133		
			610.300	0.0350		
			839.400	0.0270		
			940.300	0.0270		
			955.400	0.0550		
			987.900	0.0174		
			1081.500	0.0290		
			1191.000	0.0192		
			1207.700	0.0560		
			1246.900	0.0155		
			1373.100	0.0197		
			1426.600	0.0750		
			1449.700	0.0242		
			1552.800	0.0082		
			1598.200	0.0119		
			1700.500	0.0206		
			1724.000	0.0238		
			1794.800	0.0137		
			1943.300	0.0206		
			2029.400	0.0101		
			2091.200	0.0069		
			2232.900	0.0224		
			2245.600	0.0027		
			2303.700	0.0050		
			2416.700	0.0290		
			2446.900	0.0046		
			2454.500	0.0360		
			2542.900	0.0073		
			2550.300	0.0119		
			2565.400	0.0096		
			2583.800	0.0174		
			2601.300	0.0170		
			2723.800	0.0114		
			2871.900	0.0064		
			3007.300	0.0320		
			3396.300	0.0840		
			3479.100	0.0069		
			3539.300	0.0128		
			3555.000	0.0050		
			3624.500	0.0155		
			3654.600	0.0390		
			3683.000	0.0219		
			3741.400	0.0069		
			3773.300	0.0300		
			3826.300	0.0114		
85 Br	35	2.867 m	794.780	0.0010	0.0313	0.0228

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
85 Br	35	2.867 m	802.410	0.0256	0.0313	0.0228
			861.760	0.0023		
			865.220	0.0018		
			913.310	0.0013		
			919.060	0.0065		
			924.630	0.0163		
			1037.830	0.0010		
			1727.020	0.0038		
			1832.500	0.0015		
85 Kr m	36	4.480 h	151.170	0.7540	0.0786	0.0787
			304.860	0.1380		
85 Kr	36	10.727 y	517.000	0.0043	0.0013	0.0010
85 Sr m	38	67.660 m	151.240	0.1212	0.1147	0.1047
			231.670	0.8441		
			238.610	0.0034		
85 Sr	38	64.840 d	513.993	0.9830	0.2914	0.2219
85 Y m	39	2.680 h	215.900	0.0019	0.7233	0.5654
			231.650	0.8400		
			238.770	0.0034		
			409.500	0.0084		
			504.440	0.6030		
			511.000	1.3231		
			698.000	0.0018		
			913.890	0.0900		
			1278.100	0.0024		
			1320.600	0.0037		
85 Y	39	4.860 h	193.400	0.0035	0.6963	0.5269
			231.650	0.2340		
			438.400	0.0017		
			468.400	0.0012		
			504.400	0.0155		
			511.000	1.1533		
			535.600	0.0355		
			546.700	0.0122		
			558.200	0.0027		
			568.400	0.0172		
			576.700	0.0023		
			587.500	0.0012		
			611.900	0.0111		
			616.500	0.0089		
			667.500	0.0015		
			698.000	0.0133		
			724.500	0.0045		
			763.200	0.0018		
			767.300	0.0370		
			768.600	0.0133		
			769.700	0.0030		
			787.900	0.0161		
			796.400	0.0024		
			810.800	0.0019		
			816.800	0.0080		
			821.600	0.0022		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
85 Y	39	4.860 h	861.600	0.0100	0.6963	0.5269
			865.500	0.0012		
			910.000	0.0021		
			914.500	0.0013		
			944.500	0.0017		
			996.500	0.0055		
			1026.800	0.0011		
			1030.100	0.0207		
			1110.400	0.0011		
			1123.200	0.0183		
			1186.900	0.0028		
			1220.500	0.0203		
			1261.900	0.0066		
			1323.400	0.0070		
			1338.400	0.0017		
			1356.300	0.0055		
			1356.300	0.0013		
			1395.500	0.0045		
			1404.600	0.0316		
			1414.800	0.0042		
			1555.300	0.0022		
			1566.200	0.0023		
			1584.400	0.0122		
			1588.700	0.0034		
			1626.800	0.0028		
			1658.000	0.0013		
			1687.800	0.0015		
			1705.400	0.0061		
			1854.300	0.0042		
			1892.200	0.0183		
			1919.700	0.0014		
			1934.200	0.0022		
			1940.400	0.0059		
			2086.200	0.0015		
			2120.200	0.0081		
			2123.800	0.0510		
			2166.000	0.0045		
			2172.100	0.0233		
			2351.700	0.0058		
			2550.200	0.0023		
			2642.300	0.0013		
			2748.300	0.0011		
			2782.200	0.0034		
			2814.600	0.0012		
85 Zr	40	7.860 m	266.300	0.0237	0.8547	0.6564
			358.000	0.0112		
			416.300	0.2500		
			416.300	0.0025		
			454.300	0.4160		
			480.400	0.0021		
			511.000	1.9032		
			622.800	0.0025		
			636.700	0.0075		
			744.100	0.0029		
			782.100	0.0158		
			799.900	0.0067		
			810.900	0.0042		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/n/Ci	T Rem/h/Ci
85 Zr	40	7.860 m	836.700	0.0062	0.8547	0.6564
			837.500	0.0025		
			874.600	0.0037		
			957.300	0.0071		
			986.800	0.0025		
			990.600	0.0046		
			1118.200	0.0033		
			1170.300	0.0029		
			1191.500	0.0025		
			1198.400	0.0450		
			1290.800	0.0037		
			1339.400	0.0012		
			1410.200	0.0104		
			1419.100	0.0021		
			1518.000	0.0017		
			1567.400	0.0042		
			1730.100	0.0071		
			1768.200	0.0179		
			1876.200	0.0042		
			1934.100	0.0046		
			1937.900	0.0062		
			1955.700	0.0042		
86 Br	35	55.000 s	499.300	0.0050	1.4551	1.0722
			749.500	0.0071		
			785.120	0.0380		
			803.500	0.0280		
			1217.240	0.0600		
			1286.000	0.0770		
			1361.650	0.1050		
			1389.870	0.0990		
			1465.200	0.0560		
			1534.700	0.0930		
			1564.920	0.6400		
			1769.600	0.0120		
			1966.200	0.0720		
			2349.530	0.0960		
			2751.200	0.2120		
			2926.200	0.0270		
			5406.800	0.0460		
			5519.200	0.0280		
			6210.700	0.0058		
86 Rb m	37	1.017 m	556.070	0.9790	0.3139	0.2347
86 Rb	37	18.660 d	1076.600	0.0878	0.0508	0.0371
86 Sr	38	4.600E-07 s	99.000	0.4850	1.5712	1.1588
			627.000	1.0000		
			1078.000	1.0000		
			1154.000	1.0000		
86 Y m	39	48.000 m	98.600	0.0034	0.1164	0.1059
			208.100	0.9365		
			511.000	0.0090		
			627.200	0.0070		
			1076.600	0.0070		
			1153.100	0.0070		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
86 Y	39	14.740 h	132.340	0.0017	1.8827	1.3941
			182.340	0.0011		
			187.870	0.0126		
			190.800	0.0101		
			209.800	0.0040		
			235.370	0.0040		
			237.900	0.0013		
			252.050	0.0037		
			264.530	0.0054		
			307.000	0.0346		
			331.080	0.0083		
			370.280	0.0082		
			380.400	0.0045		
			382.860	0.0363		
			425.970	0.0031		
			439.500	0.0020		
			443.130	0.1690		
			444.180	0.0064		
			469.240	0.0030		
			511.000	0.6678		
			515.180	0.0489		
			580.570	0.0478		
			608.290	0.0201		
			618.200	0.0021		
			627.720	0.3260		
			644.820	0.0220		
			645.870	0.0920		
			689.290	0.0017		
			702.200	0.0025		
			703.330	0.1540		
			709.900	0.0262		
			719.170	0.0022		
			740.810	0.0136		
			767.630	0.0240		
			768.250	0.0032		
			777.370	0.2240		
			783.600	0.0026		
			826.020	0.0330		
			833.720	0.0150		
			835.670	0.0440		
			882.960	0.0025		
			887.400	0.0044		
			955.350	0.0104		
			971.430	0.0027		
			1017.930	0.0018		
			1024.070	0.0379		
			1076.630	0.8250		
			1092.680	0.0069		
			1102.020	0.0020		
			1133.300	0.0030		
			1153.050	0.3050		
			1163.030	0.0118		
			1253.110	0.0153		
			1270.160	0.0065		
			1283.960	0.0029		
			1294.900	0.0029		
			1296.030	0.0054		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
86 Y	39	14.740 h	1349.150	0.0295	1.8827	1.3941
			1404.800	0.0018		
			1415.200	0.0033		
			1507.860	0.0035		
			1533.190	0.0022		
			1535.670	0.0012		
			1564.400	0.0018		
			1696.250	0.0064		
			1711.600	0.0017		
			1724.150	0.0055		
			1790.900	0.0100		
			1801.700	0.0165		
			1854.380	0.1720		
			1920.720	0.2080		
			2017.100	0.0013		
			2088.090	0.0025		
			2291.800	0.0012		
			2482.080	0.0012		
			2567.970	0.0225		
			2610.110	0.0124		
			2641.900	0.0016		
			2794.900	0.0021		
			2865.900	0.0038		
			3069.700	0.0012		
			3334.000	0.0012		
86 Zr	40	16.500 h	135.600	0.0047	0.1478	0.1291
			242.800	0.9580		
			612.000	0.0570		
			620.600	0.0027		
87 Br	35	55.690 s	158.140	0.0020	1.7010	1.2517
			229.900	0.0086		
			263.710	0.0037		
			380.400	0.0018		
			421.820	0.0500		
			461.600	0.0066		
			493.290	0.0018		
			529.390	0.0120		
			531.900	0.0800		
			585.690	0.0084		
			610.460	0.0114		
			652.060	0.0170		
			681.190	0.0051		
			698.700	0.0015		
			714.720	0.0020		
			831.140	0.0120		
			874.550	0.0060		
			893.960	0.0045		
			920.900	0.0077		
			944.190	0.0188		
			952.830	0.0097		
			954.980	0.0042		
			1021.280	0.0188		
			1069.160	0.0031		
			1095.400	0.0610		
			1146.390	0.0035		
			1185.650	0.0019		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
87 Br	35	55.690 s	1278.100	0.0028	1.7010	1.2517
			1338.170	0.0085		
			1349.510	0.0042		
			1360.890	0.0490		
			1412.580	0.0087		
			1419.830	0.3200		
			1449.350	0.0172		
			1476.190	0.1170		
			1577.730	0.0860		
			1607.300	0.0185		
			1640.760	0.0045		
			1659.640	0.0031		
			1768.440	0.0103		
			1798.400	0.0096		
			1836.800	0.0140		
			1868.800	0.0028		
			1881.290	0.0420		
			1934.420	0.0040		
			2005.550	0.0770		
			2058.900	0.0021		
			2071.560	0.0350		
			2122.640	0.0178		
			2169.680	0.0067		
			2232.900	0.0033		
			2254.300	0.0034		
			2259.000	0.0036		
			2299.430	0.0060		
			2340.300	0.0046		
			2372.420	0.0139		
			2378.300	0.0030		
			2398.100	0.0077		
			2452.650	0.0101		
			2454.600	0.0064		
			2498.730	0.0083		
			2510.800	0.0036		
			2518.000	0.0090		
			2546.000	0.0015		
			2575.710	0.0090		
			2638.330	0.0083		
			2641.890	0.0082		
			2663.770	0.0032		
			2695.160	0.0036		
			2705.130	0.0256		
			2713.700	0.0035		
			2747.700	0.0122		
			2810.600	0.0012		
			2821.210	0.0253		
			2836.600	0.0217		
			2869.900	0.0047		
			2997.500	0.0330		
			3027.300	0.0181		
			3063.100	0.0030		
			3080.600	0.0024		
			3091.080	0.0047		
			3120.990	0.0044		
			3132.900	0.0042		
			3143.100	0.0036		
			3167.890	0.0052		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
87 Br	35	55.690 s	3176.400	0.0187	1.7010	1.2517
			3182.500	0.0044		
			3201.100	0.0011		
			3207.500	0.0016		
			3217.170	0.0038		
			3248.690	0.0060		
			3256.870	0.0044		
			3271.500	0.0046		
			3461.100	0.0043		
			3496.600	0.0031		
			3523.000	0.0017		
			3541.750	0.0065		
			3580.400	0.0017		
			3794.760	0.0096		
			3809.490	0.0056		
			3895.600	0.0020		
			3903.300	0.0019		
			3917.310	0.0290		
			3953.000	0.0032		
			4088.600	0.0030		
			4181.260	0.0660		
			4297.550	0.0065		
			4464.900	0.0011		
			4523.300	0.0035		
			4572.650	0.0147		
			4620.970	0.0052		
			4645.390	0.0149		
			4663.000	0.0043		
			4710.700	0.0070		
			4752.900	0.0033		
			4784.770	0.0267		
			4824.300	0.0023		
			4836.200	0.0010		
			4872.470	0.0050		
			4961.780	0.0280		
			4997.100	0.0019		
			5022.200	0.0026		
			5044.900	0.0060		
			5089.100	0.0028		
			5104.160	0.0071		
			5118.000	0.0032		
			5120.500	0.0088		
			5195.500	0.0075		
			5201.300	0.0096		
			5214.300	0.0033		
			5474.200	0.0061		
			5686.900	0.0016		
			5687.400	0.0016		
87 Kr	36	1.272 h	402.578	0.5000	0.3780	0.2896
			673.830	0.0189		
			814.250	0.0016		
			836.370	0.0077		
			845.440	0.0730		
			946.690	0.0013		
			1175.400	0.0111		
			1338.000	0.0063		
			1382.550	0.0029		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
87 Kr	36	1.272 h	1389.870	0.0012	0.3780	0.2896
			1531.200	0.0036		
			1578.030	0.0013		
			1611.180	0.0010		
			1740.520	0.0204		
			1842.610	0.0014		
			2011.880	0.0288		
			2408.500	0.0023		
			2554.800	0.0920		
			2558.100	0.0390		
			2811.400	0.0032		
			3308.500	0.0045		
87 Sr	38	2.810 h	388.400	0.8226	0.1828	0.1558
87 Y m	39	12.900 h	381.000	0.7805	0.1744	0.1496
			511.000	0.0150		
87 Y	39	3.346 d	388.400	0.8180	0.4408	0.3555
			484.900	0.9220		
			511.000	0.0042		
87 Zr m	40	14.000 s	135.100	0.2740	0.1183	0.1133
			201.200	0.9600		
87 Zr	40	1.733 h	381.000	0.7900	0.6854	0.5384
			511.000	1.6039		
			611.000	0.0012		
			772.000	0.0024		
			794.000	0.0030		
			797.000	0.0018		
			973.000	0.0012		
			1024.000	0.0085		
			1159.000	0.0024		
			1203.000	0.0015		
			1210.000	0.0100		
			1227.000	0.0303		
			1400.000	0.0012		
			2222.000	0.0027		
87 Nb	41	2.600 m	201.200	0.4590	1.0603	0.8093
			269.000	0.0275		
			470.600	0.3380		
			511.000	1.7600		
			600.000	0.0400		
			616.600	0.1340		
			801.700	0.0240		
			887.000	0.0330		
			983.000	0.0220		
			1066.800	0.1200		
			1083.000	0.0140		
			1168.000	0.0170		
			1285.000	0.0180		
			1559.000	0.0140		
			1683.600	0.0520		
			1884.500	0.1480		
			2153.300	0.0170		
87 Nb m	41	3.820 m	135.100	0.2720	0.6817	0.5429

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
87 Nb m	41	3.820 m	201.200	0.9600	0.6817	0.5429
			511.000	1.9120		
88 Br	35	16.300 s	121.500	0.0015	1.1304	0.8258
			288.900	0.0015		
			698.000	0.0023		
			764.900	0.0080		
			775.200	0.7700		
			793.400	0.0120		
			802.100	0.1580		
			868.500	0.0410		
			1053.700	0.0177		
			1073.800	0.0131		
			1285.900	0.0054		
			1351.900	0.0069		
			1369.000	0.0110		
			1428.600	0.0031		
			1440.700	0.0500		
			1467.900	0.0031		
			1567.000	0.0230		
			1577.500	0.0350		
			1644.200	0.0310		
			1855.500	0.0085		
			1877.100	0.0038		
			2052.900	0.0054		
			2154.400	0.0046		
			2216.200	0.0054		
			2270.000	0.0085		
			2288.100	0.0054		
			2428.500	0.0077		
			2491.400	0.0031		
			2504.200	0.0038		
			2624.500	0.0177		
			2828.600	0.0054		
			2875.300	0.0200		
			2945.700	0.0239		
			3019.400	0.0115		
			3278.800	0.0285		
			3399.800	0.0092		
			3493.000	0.0146		
			3932.200	0.0500		
			4021.700	0.0262		
			4147.900	0.0420		
			4255.200	0.0092		
			4311.000	0.0077		
			4562.800	0.0320		
			4663.500	0.0085		
			4713.400	0.0108		
			5019.300	0.0208		
			5297.400	0.0054		
			5478.800	0.0038		
88 Kr	36	2.840 h	122.270	0.0020	0.8852	0.6606
			165.980	0.0310		
			196.320	0.2600		
			240.710	0.0025		
			311.690	0.0011		
			334.710	0.0015		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
88 Kr	36	2.840 h	362.226	0.0225	0.8862	0.6606
			390.543	0.0064		
			421.700	0.0013		
			471.800	0.0073		
			677.340	0.0024		
			788.280	0.0053		
			790.320	0.0013		
			834.830	0.1300		
			850.340	0.0017		
			862.327	0.0067		
			944.920	0.0029		
			985.780	0.0131		
			990.090	0.0014		
			1039.590	0.0048		
			1049.480	0.0014		
			1141.330	0.0128		
			1179.510	0.0100		
			1184.950	0.0069		
			1209.840	0.0014		
			1212.730	0.0014		
			1245.220	0.0036		
			1250.670	0.0112		
			1324.980	0.0016		
			1352.320	0.0016		
			1369.500	0.0148		
			1406.940	0.0022		
			1464.840	0.0011		
			1518.390	0.0215		
			1529.770	0.1090		
			1603.790	0.0046		
			1685.600	0.0066		
			1892.760	0.0014		
			1908.700	0.0010		
			2029.840	0.0453		
			2035.411	0.0374		
			2186.500	0.0029		
			2195.842	0.1320		
			2231.772	0.0339		
			2352.080	0.0073		
			2392.110	0.3460		
			2408.910	0.0010		
			2548.400	0.0062		
			2771.020	0.0015		
98 Rb	37	17.800 m	898.030	0.1400	0.2965	0.2183
			1366.260	0.0010		
			1382.390	0.0074		
			1779.830	0.0022		
			1836.000	0.2140		
			2111.220	0.0012		
			2577.720	0.0018		
			2677.860	0.0196		
			2734.030	0.0011		
			3009.430	0.0024		
			3218.480	0.0021		
			3486.460	0.0013		
			4742.690	0.0014		
88 Y	39	106.640 d	511.000	0.0044	1.3245	0.9743

Nuclide	Z	Half Life	Energy keV	Yield	Γ R²m2/h/Ci	T Rem/h/Ci
88 Y	39	106.640 d	898.020	0.9340	1.3245	0.9743
			1836.040	0.9935		
			2734.030	0.0064		
88 Zr	40	83.400 d	392.900	1.0000	0.2249	0.1906
88 Nb m	41	7.800 m	262.500	0.1020	2.0753	1.5546
			399.600	0.4400		
			451.000	0.2500		
			511.000	1.8860		
			534.100	0.1370		
			638.200	0.2590		
			661.800	0.0430		
			760.700	0.1690		
			918.400	0.1130		
			1056.900	0.9300		
			1082.500	0.5900		
			1399.200	0.0590		
			1817.900	0.1020		
			1975.400	0.0600		
88 Nb	41	14.300 m	76.700	0.2400	2.2867	1.7164
			271.900	0.2900		
			399.600	0.3200		
			502.800	0.8000		
			511.000	1.8200		
			671.000	0.6600		
			1056.900	1.0000		
			1082.500	0.9800		
89 Kr	36	3.170 m	196.200	0.0021	0.8099	0.6042
			197.500	0.0181		
			205.030	0.0012		
			220.900	0.1990		
			264.110	0.0066		
			338.200	0.0034		
			345.030	0.0117		
			356.060	0.0410		
			364.880	0.0090		
			369.300	0.0137		
			402.250	0.0032		
			411.420	0.0255		
			438.080	0.0096		
			466.130	0.0080		
			490.760	0.0032		
			497.500	0.0660		
			498.600	0.0113		
			557.300	0.0016		
			576.960	0.0560		
			585.800	0.1640		
			626.200	0.0060		
			629.750	0.0034		
			665.720	0.0011		
			671.400	0.0011		
			674.110	0.0023		
			696.240	0.0177		
			707.010	0.0050		
			710.050	0.0078		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
89 Kr	36	3.170 m	729.630	0.0029	0.8099	0.6042
			738.390	0.0420		
			747.400	0.0011		
			762.900	0.0040		
			762.900	0.0092		
			776.490	0.0111		
			826.750	0.0076		
			835.530	0.0109		
			857.370	0.0028		
			867.080	0.0590		
			870.420	0.0016		
			904.270	0.0710		
			930.950	0.0062		
			944.190	0.0016		
			953.180	0.0011		
			960.420	0.0032		
			974.390	0.0098		
			997.370	0.0066		
			1010.840	0.0011		
			1044.400	0.0041		
			1076.480	0.0023		
			1088.070	0.0036		
			1103.180	0.0090		
			1107.780	0.0291		
			1116.610	0.0165		
			1131.510	0.0016		
			1162.500	0.0021		
			1172.330	0.0098		
			1182.380	0.0017		
			1186.540	0.0018		
			1228.800	0.0014		
			1235.620	0.0059		
			1273.730	0.0135		
			1324.280	0.0304		
			1335.400	0.0013		
			1340.600	0.0019		
			1367.480	0.0015		
			1372.160	0.0013		
			1412.590	0.0026		
			1421.640	0.0022		
			1461.300	0.0012		
			1464.200	0.0018		
			1468.500	0.0019		
			1472.760	0.0680		
			1500.960	0.0131		
			1506.100	0.0011		
			1530.040	0.0330		
			1533.680	0.0510		
			1555.280	0.0015		
			1573.780	0.0019		
			1634.060	0.0082		
			1643.820	0.0034		
			1667.510	0.0013		
			1676.900	0.0014		
			1683.800	0.0013		
			1692.000	0.0025		
			1693.700	0.0440		
			1721.290	0.0022		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
89 Kr	36	3.170 m	1777.600	0.0076	0.8099	0.6042
			1788.200	0.0011		
			1810.730	0.0014		
			1837.500	0.0012		
			1839.720	0.0035		
			1868.470	0.0020		
			1879.800	0.0016		
			1903.400	0.0103		
			1939.110	0.0064		
			1966.550	0.0013		
			1998.600	0.0012		
			2012.230	0.0155		
			2021.040	0.0024		
			2046.470	0.0026		
			2100.630	0.0094		
			2160.020	0.0053		
			2195.800	0.0013		
			2280.200	0.0020		
			2377.400	0.0080		
			2400.990	0.0072		
			2597.920	0.0011		
			2645.260	0.0042		
			2750.900	0.0012		
			2782.110	0.0076		
			2793.750	0.0068		
			2819.580	0.0013		
			2853.300	0.0024		
			2866.230	0.0173		
			2878.690	0.0032		
			3017.900	0.0025		
			3029.160	0.0027		
			3107.260	0.0019		
			3140.260	0.0103		
			3219.840	0.0043		
			3361.700	0.0103		
			3371.100	0.0062		
			3399.900	0.0014		
			3532.880	0.0133		
			3583.900	0.0026		
			3717.800	0.0084		
			3732.500	0.0014		
			3781.400	0.0013		
			3827.400	0.0014		
			3842.700	0.0011		
			3901.700	0.0013		
			3923.000	0.0041		
			3965.500	0.0021		
			3977.500	0.0027		
			3996.000	0.0014		
			4048.000	0.0012		
			4341.100	0.0010		
			4489.200	0.0013		
89 Rb	37	15.200 m	272.450	0.0142	1.0219	0.7504
			289.760	0.0054		
			657.710	0.1000		
			766.790	0.0016		
			947.690	0.0020		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
89 Rb	37	15.200 m	1025.300	0.0023	1.0219	0.7504
			1031.880	0.5800		
			1220.320	0.0022		
			1228.400	0.0012		
			1248.100	0.4300		
			1473.220	0.0035		
			1501.070	0.0020		
			1538.080	0.0255		
			1940.200	0.0033		
			2007.540	0.0238		
			2058.000	0.0023		
			2196.000	0.1330		
			2280.060	0.0018		
			2570.140	0.0990		
			2707.200	0.0203		
			3508.840	0.0115		
89 Y	39	16.060 s	909.200	1.0000	0.5038	0.3666
89 Zr m	40	4.180 m	511.000	0.0302	0.3570	0.2645
			587.800	0.8954		
			1507.400	0.0604		
89 Zr	40	3.268 d	511.000	0.4528	0.6440	0.4733
			909.200	0.9987		
			1712.900	0.0077		
			1744.500	0.0013		
89 Nb m	41	66.000 m	507.400	0.8500	1.1120	0.8396
			511.000	1.6380		
			588.000	1.0000		
			650.300	0.0080		
			769.600	0.0650		
			1277.500	0.0160		
89 Nb	41	2.033 h	229.200	0.0014	0.7124	0.5364
			355.700	0.0025		
			480.800	0.0014		
			507.400	0.0080		
			511.000	1.5101		
			532.400	0.0054		
			588.000	0.0120		
			738.600	0.0023		
			863.100	0.0047		
			920.500	0.0148		
			964.000	0.0011		
			1060.500	0.0027		
			1127.000	0.0220		
			1242.500	0.0025		
			1259.000	0.0127		
			1303.000	0.0033		
			1332.300	0.0127		
			1447.700	0.0040		
			1464.800	0.0090		
			1511.400	0.0199		
			1580.800	0.0054		
			1627.200	0.0362		
			1641.200	0.0020		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
89 Nb	41	2.033 h	1833.400	0.0340	0.7124	0.5364
			2101.100	0.0062		
			2128.200	0.0058		
			2132.000	0.0013		
			2221.000	0.0019		
			2297.000	0.0012		
			2572.300	0.0275		
			2612.100	0.0031		
			2753.500	0.0047		
			2889.600	0.0021		
			2925.800	0.0019		
			2960.100	0.0181		
			3016.200	0.0022		
			3092.700	0.0310		
			3575.800	0.0020		
90 Kr	36	32.320 s	106.050	0.0039	0.6514	0.4909
			120.920	0.0280		
			121.820	0.3300		
			227.760	0.0012		
			234.440	0.0260		
			242.190	0.0980		
			249.320	0.0131		
			309.070	0.0013		
			356.000	0.0010		
			386.480	0.0013		
			419.120	0.0031		
			429.930	0.0015		
			433.470	0.0128		
			470.340	0.0023		
			492.630	0.0118		
			498.590	0.0015		
			539.490	0.3000		
			554.370	0.0500		
			565.190	0.0020		
			569.200	0.0059		
			614.380	0.0021		
			619.080	0.0106		
			626.490	0.0028		
			661.230	0.0032		
			677.690	0.0037		
			690.720	0.0039		
			705.470	0.0012		
			731.330	0.0146		
			925.490	0.0022		
			941.860	0.0131		
			967.330	0.0021		
			980.290	0.0018		
			1039.110	0.0041		
			1103.920	0.0034		
			1118.690	0.3800		
			1165.560	0.0081		
			1240.340	0.0034		
			1341.310	0.0015		
			1386.620	0.0019		
			1423.770	0.0290		
			1466.260	0.0024		
			1537.850	0.0950		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
90 Kr	36	32.320 s	1552.180	0.0215	0.6514	0.4909
			1620.220	0.0015		
			1658.180	0.0130		
			1780.040	0.0660		
			1885.420	0.0022		
			1899.610	0.0019		
			1980.990	0.0017		
			2006.000	0.0012		
			2127.520	0.0135		
			2149.510	0.0027		
			2191.460	0.0011		
			2417.330	0.0019		
			2432.780	0.0015		
			2468.560	0.0046		
			2726.680	0.0086		
			2855.400	0.0032		
			2865.730	0.0018		
			3344.300	0.0011		
90 Rb	37	2.550 m	824.230	0.0075	0.8524	0.6224
			831.690	0.3300		
			997.850	0.0051		
			1038.630	0.0035		
			1060.700	0.0780		
			1140.500	0.0013		
			1302.200	0.0012		
			1326.500	0.0015		
			1375.360	0.0035		
			1590.300	0.0016		
			1631.780	0.0019		
			1665.610	0.0037		
			1668.900	0.0017		
			1804.100	0.0067		
			1829.800	0.0017		
			1892.280	0.0044		
			2139.300	0.0036		
			2148.200	0.0024		
			2207.470	0.0051		
			2216.290	0.0059		
			2239.700	0.0018		
			2473.900	0.0068		
			2476.700	0.0012		
			2688.900	0.0014		
			2724.300	0.0016		
			2789.100	0.0010		
			2980.700	0.0010		
			3039.170	0.0082		
			3081.300	0.0017		
			3205.090	0.0055		
			3295.090	0.0095		
			3303.910	0.0098		
			3317.000	0.0031		
			3361.880	0.0108		
			3383.240	0.0750		
			3534.240	0.0450		
			3538.600	0.0017		
			3627.400	0.0014		
			3814.360	0.0065		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
90 Rb	37	2.550 m	4061 700	0.0026	0.8524	0.6224
			4087.300	0.0028		
			4135.510	0.0750		
			4332.100	0.0043		
			4355.800	0.0049		
			4365.900	0.0880		
			4599.400	0.0017		
			4646.450	0.0248		
			4974.100	0.0023		
			5070.200	0.0016		
			5187.400	0.0129		
			5254.300	0.0026		
			5333.000	0.0048		
90 Rb m	37	4.300 m	106.920	0.0037	1.4777	1.0819
			196.800	0.0029		
			314.500	0.0082		
			442 300	0.0012		
			522.100	0.0040		
			551.200	0.0085		
			720.700	0.0056		
			779.900	0.0027		
			824.230	0.0730		
			831.690	0.9100		
			872.000	0.0053		
			921.200	0.0023		
			952.440	0.0170		
			1013.950	0.0026		
			1027.100	0.0014		
			1060.700	0.0930		
			1140.500	0.0080		
			1242.840	0.0306		
			1271.770	0.0160		
			1298.500	0.0020		
			1375.360	0.1660		
			1377.200	0.0230		
			1391.600	0.0044		
			1425.200	0.0027		
			1456.700	0.0026		
			1460.100	0.0019		
			1485.600	0.0021		
			1489.000	0.0035		
			1576.900	0.0012		
			1603.520	0.0047		
			1658.900	0.0044		
			1665.610	0.0449		
			1692.100	0.0027		
			1696.160	0.0166		
			1738.930	0.0193		
			1747.300	0.0026		
			1793.890	0.0085		
			1838.150	0.0083		
			1877.400	0.0045		
			1892.280	0.0064		
			1903.100	0.0014		
			1941.810	0.0062		
			2128.300	0.0526		
			2139.330	0.0012		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
90 Rb m	37	4.300 m	2200.900	0.0648	1.4777	1.0819
			2207.470	0.0016		
			2245.200	0.0029		
			2256.550	0.0067		
			2298.100	0.0037		
			2311.200	0.0029		
			2335.200	0.0021		
			2442.900	0.0026		
			2497.270	0.0072		
			2537.800	0.0017		
			2543.900	0.0056		
			2592.300	0.0065		
			2617.800	0.0062		
			2724.270	0.0050		
			2741.000	0.0015		
			2752.680	0.1160		
			2834.430	0.0186		
			2900.300	0.0011		
			2911.700	0.0013		
			3032.100	0.0044		
			3039.170	0.0027		
			3148.580	0.0250		
			3197.900	0.0015		
			3214.500	0.0014		
			3317.000	0.1440		
			3370.800	0.0040		
			3383.240	0.0042		
			3503.520	0.0238		
			3572.820	0.0155		
			3620.800	0.0058		
			3627.400	0.0090		
			3972.200	0.0037		
			4115.600	0.0036		
			4192.800	0.0086		
			4209.500	0.0091		
			4257.300	0.0074		
			4454.070	0.0119		
			4726.100	0.0011		
90 Y	39	3.190 h	202.510	0.9581	0.3517	0.2900
			479.530	0.8998		
			682.000	0.0036		
90 Nb	41	14.600 h	132.590	0.0450	2.0264	1.5159
			141.149	0.7000		
			337.000	0.0046		
			371.010	0.0150		
			511.000	1.0620		
			518.220	0.0050		
			554.500	0.0028		
			758.000	0.0014		
			784.000	0.0013		
			827.700	0.0090		
			890.600	0.0173		
			899.000	0.0022		
			1054.000	0.0020		
			1129.100	0.9200		
			1270.600	0.0145		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
90 Nb	41	14.600 h	1470.500	0.0060	2.0264	1.5159
			1574.800	0.0047		
			1611.800	0.0239		
			1656.000	0.0024		
			1698.500	0.0017		
			1716.200	0.0052		
			1740.000	0.0016		
			1787.500	0.0046		
			1843.300	0.0075		
			1876.000	0.0028		
			1882.000	0.0018		
			1913.300	0.0130		
			1926.000	0.0030		
			1984.000	0.0060		
			2085.000	0.0046		
			2186.400	0.1800		
			2222.500	0.0064		
			2319.200	0.8200		
90 Mo	42	5.670 h	42.700	0.0217	0.4387	0.3613
			122.370	0.6400		
			162.930	0.0600		
			203.130	0.0640		
			257.340	0.7800		
			323.200	0.0630		
			424.400	0.0036		
			440.500	0.0093		
			445.370	0.0600		
			472.200	0.0142		
			489.800	0.0070		
			511.000	0.4960		
			941.500	0.0550		
			946.400	0.0070		
			990.200	0.0101		
			1271.300	0.0410		
			1387.400	0.0186		
			1454.600	0.0190		
			1463.500	0.0070		
			1481.600	0.0023		
90 Tc	43	7.900 s	511.000	1.9880	0.6637	0.5035
			947.900	0.1490		
91 Kr	36	8.570 s	108.780	0.4300	0.8113	0.6073
			215.460	0.0018		
			397.830	0.0157		
			400.700	0.0021		
			412.040	0.0235		
			446.780	0.0165		
			474.630	0.0091		
			481.390	0.0124		
			489.490	0.0043		
			501.970	0.0160		
			506.580	0.1910		
			545.960	0.0041		
			555.570	0.0194		
			569.000	0.0020		
			588.220	0.0090		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
91 Kr	36	8.570 s	612.870	0.0770	0.8113	0.6073
			630.140	0.0222		
			662.420	0.0128		
			671.460	0.0070		
			680.000	0.0012		
			712.390	0.0022		
			721.650	0.0066		
			740.640	0.0057		
			761.010	0.0104		
			771.860	0.0035		
			780.200	0.0010		
			785.250	0.0047		
			797.680	0.0024		
			802.170	0.0012		
			807.140	0.0057		
			814.000	0.0013		
			817.640	0.0046		
			822.140	0.0040		
			825.820	0.0041		
			846.700	0.0011		
			858.680	0.0026		
			874.920	0.0127		
			879.500	0.0013		
			893.600	0.0017		
			895.000	0.0029		
			900.500	0.0016		
			953.240	0.0033		
			955.740	0.0032		
			992.100	0.0013		
			995.080	0.0080		
			1008.980	0.0019		
			1024.910	0.0290		
			1028.300	0.0065		
			1041.800	0.0022		
			1058.900	0.0027		
			1085.900	0.0012		
			1091.610	0.0034		
			1102.180	0.0076		
			1108.680	0.0720		
			1129.800	0.0011		
			1136.810	0.0104		
			1158.800	0.0010		
			1178.030	0.0129		
			1195.420	0.0026		
			1202.200	0.0012		
			1215.570	0.0066		
			1227.490	0.0012		
			1247.400	0.0017		
			1267.830	0.0067		
			1277.000	0.0021		
			1281.110	0.0062		
			1292.950	0.0049		
			1304.280	0.0125		
			1311.340	0.0044		
			1315.540	0.0059		
			1324.220	0.0055		
			1327.300	0.0013		
			1338.000	0.0017		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
91 Kr	36	8.570 s	1353.540	0.0060	0.8113	0.6073
			1356.170	0.0075		
			1359.630	0.0022		
			1365.300	0.0023		
			1368.500	0.0033		
			1386.990	0.0055		
			1392.740	0.0055		
			1402.000	0.0023		
			1419.720	0.0084		
			1426.100	0.0010		
			1439.110	0.0036		
			1456.500	0.0035		
			1459.000	0.0028		
			1468.200	0.0016		
			1479.900	0.0054		
			1500.600	0.0070		
			150[illegible]00	0.0480		
			1506 300	0.0083		
			1525.000	0.0016		
			1528.290	0.0091		
			1537.340	0.0033		
			1547.650	0.0037		
			1555.300	0.0061		
			1557.200	0.0048		
			1563.600	0.0017		
			1583.510	0.0038		
			1589.200	0.0011		
			1614.070	0.0104		
			1626.700	0.0033		
			1633.500	0.0014		
			1650.220	0.0017		
			1659.400	0.0010		
			1666.730	0.0079		
			1666.730	0.0027		
			1675.830	0.0038		
			1681.200	0.0017		
			1697.600	0.0015		
			1710.000	0.0024		
			1725.200	0.0019		
			1727.850	[illegible].0050		
			1741.780	0.0080		
			1752.900	0.0019		
			1778.850	0.0082		
			1783.400	0.0038		
			1789.430	0.0041		
			1823.050	0.0030		
			1827.100	0.0020		
			1834.600	0.0013		
			1843.100	0.0013		
			1866.200	0.0017		
			1871.800	0.0019		
			1874.990	0.0047		
			1880.100	0.0024		
			1884.300	0.0010		
			1965.110	0.0067		
			1982.700	0.0017		
			2039.360	0.0039		
			2057.270	0.0042		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
91 Kr	36	8.570 s	2072.250	0.0031	0.8113	0.6073
			2087.000	0.0017		
			2139.980	0.0071		
			2195.990	0.0035		
			2242.500	0.0017		
			2251.400	0.0014		
			2268.600	0.0023		
			2281.100	0.0015		
			2322.600	0.0011		
			2377.340	0.0036		
			2381.870	0.0022		
			2391.800	0.0011		
			2395.100	0.0013		
			2413.700	0.0034		
			2425.000	0.0015		
			2447.300	0.0025		
			2450.700	0.0068		
			2457.700	0.0035		
			2473.100	0.0041		
			2480.000	0.0021		
			2484.350	0.0278		
			2495.820	0.0069		
			2539.400	0.0017		
			2550.600	0.0018		
			2558.000	0.0017		
			2559.400	0.0035		
			2585.600	0.0010		
			2593.150	0.0054		
			2606.900	0.0024		
			2620.330	0.0067		
			2627.700	0.0017		
			2642.500	0.0020		
			2732.100	0.0024		
			2735.830	0.0148		
			2752.590	0.0074		
			2769.400	0.0021		
			2809.900	0.0012		
			2811.700	0.0027		
			2845.000	0.0033		
			2855.300	0.0040		
			2870.540	0.0085		
			2893.500	0.0040		
			2919.900	0.0027		
			2930.800	0.0020		
			2966.600	0.0013		
			2981.850	0.0130		
			3001.900	0.0026		
			3005.100	0.0011		
			3041.300	0.0013		
			3052.600	0.0016		
			3056.800	0.0087		
			3097.400	0.0037		
			3109.600	0.0036		
			3113.500	0.0213		
			3180.900	0.0011		
			3324.900	0.0022		
			3393.600	0.0028		
			3403.400	0.0016		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
91 Kr	36	8.570 s	3444.400	0.0021	0.8113	0.6073
			3578.400	0.0011		
91 Rb	37	58.400 s	93.630	0.3400	0.9559	0.7097
			345.430	0.0830		
			439.150	0.0209		
			509.600	0.0017		
			593.230	0.0129		
			602.850	0.0283		
			702.660	0.0010		
			749.730	0.0011		
			816.500	0.0010		
			875.000	0.0011		
			917.590	0.0019		
			948.490	0.0117		
			993.690	0.0030		
			1023.200	0.0044		
			1034.900	0.0013		
			1041.990	0.0219		
			1137.240	0.0390		
			1205.600	0.0012		
			1230.640	0.0029		
			1274.050	0.0025		
			1299.900	0.0016		
			1367.760	0.0076		
			1388.130	0.0022		
			1482.170	0.0145		
			1594.150	0.0041		
			1615.860	0.0246		
			1624.800	0.0050		
			1625.400	0.0071		
			1628.490	0.0090		
			1646.510	0.0026		
			1712.000	0.0021		
			1719.900	0.0031		
			1740.250	0.0142		
			1766.170	0.0017		
			1794.500	0.0012		
			1823.300	0.0036		
			1841.100	0.0013		
			1849.270	0.0330		
			1859.560	0.0015		
			1874.400	0.0011		
			1917.110	0.0076		
			1942.810	0.0040		
			1970.990	0.0670		
			2013.500	0.0027		
			2036.100	0.0037		
			2064.690	0.0079		
			2143.220	0.0067		
			2161.800	0.0012		
			2196.000	0.0019		
			2208.500	0.0010		
			2218.200	0.0028		
			2236.900	0.0014		
			2254.600	0.0012		
			2263.100	0.0015		
			2322.340	0.0045		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R²m2/h/Ci	T Rem/h/Ci
91 Rb	37	58.400 s	2448.500	0.0015	0.9559	0.7097
			2505.950	0.0142		
			2564.190	0.1250		
			2606.700	0.0014		
			2724.200	0.0017		
			2783.300	0.0033		
			2789.600	0.0049		
			2847.390	0.0065		
			2872.500	0.0019		
			2897.600	0.0021		
			2912.000	0.0033		
			2925.720	0.0152		
			2958.600	0.0013		
			2990.600	0.0020		
			3007.600	0.0027		
			3107.900	0.0016		
			3147.300	0.0065		
			3224.400	0.0033		
			3270.900	0.0044		
			3284.700	0.0016		
			3302.200	0.0014		
			3337.800	0.0022		
			3346.200	0.0018		
			3353.100	0.0020		
			3376.500	0.0027		
			3395.400	0.0032		
			3446.500	0.0148		
			3599.670	0.1040		
			3604.300	0.0037		
			3639.140	0.0121		
			3643.750	0.0079		
			3736.500	0.0057		
			3745.900	0.0020		
			3800.700	0.0015		
			3839.300	0.0061		
			3844.330	0.0102		
			3888.400	0.0028		
			3938.700	0.0018		
			3949.560	0.0064		
			3984.700	0.0041		
			4043.260	0.0074		
			4061.300	0.0011		
			4078.250	0.0410		
			4095.700	0.0024		
			4157.480	0.0070		
			4171.700	0.0028		
			4189.200	0.0023		
			4224.800	0.0010		
			4234.100	0.0022		
			4249.000	0.0034		
			4253.700	0.0038		
			4265.450	0.0143		
			4297.100	0.0012		
			4453.100	0.0015		
91 Sr	38	9.520 h	261.200	0.0045	0.5632	0.4148
			272.600	0.0026		
			274.700	0.0103		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
91 Sr	38	9.520 h	379.900	0.0015	0.5632	0.4148
			555.600	0.5600		
			620.100	0.0177		
			631.300	0.0055		
			652.300	0.0300		
			652.900	0.0800		
			653.000	0.0037		
			660.900	0.0010		
			749.800	0.2360		
			761.400	0.0057		
			820.800	0.0016		
			879.700	0.0019		
			925.800	0.0380		
			1024.300	0.3340		
			1054.600	0.0022		
			1140.800	0.0013		
			1280.900	0.0093		
			1413.400	0.0098		
			1473.800	0.0017		
			1651.400	0.0029		
			1724.000	0.0016		
91 Y m	39	49.710 m	555.600	1.0000	0.3203	0.2396
91 Y	39	58.510 d	1204.900	0.0030	0.0019	0.0014
91 Zr	40	4.350E-06 s	289.800	0.1120	1.4402	1.0630
			537.000	0.0147		
			570.000	0.0112		
			596.900	0.0340		
			725.700	0.0550		
			859.000	0.8400		
			879.400	0.0380		
			2131.100	0.1380		
			2169.900	0.8600		
91 Nb	41	3.600E-06 s	50.100	0.0651	0.9184	0.6867
			194.100	0.3400		
			603.500	0.0130		
			1082.600	0.0109		
			1790.600	0.3630		
			1984.600	0.6260		
91 Nb m	41	62.000 d	104.500	0.0056	0.0224	0.0165
			1205.000	0.0350		
91 Nb	41	10006.849 y	511.000	0.0033	0.0010	0.0007
91 Mo m	42	1.092 m	425.900	0.0017	0.5748	0.4301
			511.000	0.8760		
			732.600	0.0017		
			1032.700	0.0053		
			1082.200	0.0050		
			1158.500	0.0028		
			1208.100	0.1880		
			1508.000	0.2440		
			2240.700	0.0073		
91 Mo	42	15.490 m	511.000	1.8748	0.5582	0.4256

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
91 Mo	42	15.490 m	1581.500	0.0023	0.5582	0.4256
			1637.300	0.0033		
			2631.900	0.0012		
91 Tc	43	3.140 m	217.800	0.0014	1.2214	0.9145
			277.900	0.0062		
			297.100	0.0024		
			337.500	0.0115		
			375.800	0.0051		
			483.200	0.0109		
			502.900	0.0083		
			511.000	1.8092		
			548.700	0.0168		
			562.000	0.0018		
			628.400	0.0075		
			652.900	0.0080		
			668.800	0.0032		
			811.000	0.0510		
			813.900	0.0180		
			844.900	0.0122		
			851.800	0.0086		
			878.400	0.0110		
			902.800	0.0162		
			935.900	0.0021		
			985.000	0.0022		
			992.700	0.0022		
			1076.500	0.0094		
			1088.900	0.0059		
			1111.100	0.0320		
			1146.700	0.0015		
			1244.200	0.0011		
			1255.600	0.0011		
			1286.000	0.0029		
			1322.600	0.0070		
			1354.400	0.0073		
			1362.000	0.0440		
			1414.200	0.0078		
			1491.400	0.0019		
			1564.900	0.0700		
			1605.200	0.0790		
			1639.900	0.0920		
			1650.400	0.0057		
			1671.100	0.0015		
			1731.000	0.0014		
			1752.000	0.0010		
			1762.700	0.0011		
			1795.400	0.0011		
			1902.300	0.0610		
			2173.000	0.0031		
			2233.800	0.0133		
			2296.300	0.0048		
			2350.900	0.1380		
			2492.300	0.0062		
			2527.400	0.0067		
			2580.800	0.0013		
			2716.400	0.0187		
			2724.100	0.0013		
			2781.300	0.0320		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
91 Tc	43	3.140 m	2793.700	0.0026	1.2214	0.9145
			2859.600	0.0014		
			2887.800	0.0140		
			3009.200	0.0025		
			3118.300	0.0024		
			3197.400	0.0018		
			3419.400	0.0020		
			3453.600	0.0012		
			3592.900	0.0017		
			3737.000	0.0012		
91 Tc	43	3.300 m	502.900	0.5000	1.1795	0.8861
			511.000	1.9260		
			606.700	0.0145		
			652.900	0.9400		
			927.600	0.0370		
			1328.400	0.0251		
			1362.000	0.0250		
			1430.400	0.0196		
			1534.400	0.0245		
			1605.200	0.0012		
			1639.900	0.0035		
			2037.400	0.0052		
			3045.600	0.0037		
			3081.400	0.0012		
			3531.000	0.0071		
92 Kr	36	1.850 s	142.400	0.6600	0.7305	0.5540
			159.200	0.0011		
			167.900	0.0013		
			185.600	0.0011		
			191.100	0.0086		
			214.900	0.0037		
			281.950	0.0028		
			316.800	0.0600		
			342.300	0.0218		
			350.300	0.0028		
			372.300	0.0012		
			394.700	0.0012		
			436.200	0.0022		
			440.000	0.0062		
			480.900	0.0018		
			484.700	0.0330		
			492.600	0.0030		
			535.000	0.0042		
			548.300	0.1440		
			585.900	0.0023		
			623.700	0.0139		
			632.600	0.0019		
			678.100	0.0038		
			683.700	0.0017		
			728.400	0.0012		
			737.400	0.0053		
			785.700	0.0046		
			812.600	0.1500		
			826.000	0.0013		
			876.300	0.0440		
			921.000	0.0028		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
92 Kr	36	1.850 s	928.000	0.0014	0.7305	0.5540
			1044.200	0.0490		
			1115.800	0.0011		
			1178.900	0.0011		
			1218.600	0.6200		
			1240.500	0.0016		
			1310.700	0.0012		
			1345.500	0.0046		
			1360.800	0.0356		
			1415.100	0.0017		
			1554.400	0.0040		
			1896.800	0.0086		
			1973.400	0.0015		
			1987.400	0.0025		
			2039.000	0.0020		
			2277.300	0.0012		
			2435.100	0.0011		
			2444.900	0.0018		
			2468.500	0.0018		
			2585.100	0.0013		
			2587.500	0.0025		
			2611.400	0.0030		
			2718.700	0.0028		
			2759.000	0.0022		
			2832.800	0.0031		
			3056.900	0.0013		
			3149.000	0.0013		
			3199.500	0.0045		
92 Rb	37	4.500 s	393.500	0.0015	0.0842	0.0617
			569.800	0.0068		
			756.000	0.0014		
			814.700	0.0400		
			963.500	0.0018		
			1273.400	0.0012		
			1325 800	0.0017		
			1384.600	0.0044		
			1712.300	0.0052		
			2820.600	0.0075		
			3110.000	0.0012		
			4427.900	0.0016		
			4637.700	0.0027		
			4809.300	0.0013		
			4835.900	0.0012		
			4922.600	0.0013		
			5086.200	0.0010		
			5188.100	0.0030		
			5215.100	0.0013		
			5248.700	0.0013		
			5301.700	0.0010		
			5497.700	0.0010		
			5573.700	0.0010		
			5584.200	0.0020		
			5632.200	0.0024		
			5900.600	0.0011		
			6114.800	0.0010		
92 Sr	38	2.710 h	241.520	0.0300	0.6807	0.5026

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
92 Sr	38	2.710 h	430.560	0.0330	0.6807	0.5026
			491.300	0.0026		
			650.800	0.0037		
			953.320	0.0360		
			1142.300	0.0290		
			1383.940	0.9000		
92 Y	39	3.540 h	448.500	0.0230	0.1344	0.0988
			492.600	0.0049		
			561.100	0.0240		
			844.300	0.0125		
			912.800	0.0063		
			934.500	0.1390		
			1132.400	0.0024		
			1405.400	0.0480		
			1847.300	0.0036		
92 Nb m	41	10.150 d	912.600	0.0178	0.5269	0.3837
			934.440	0.9900		
			1847.500	0.0088		
92 Nb	41	3.502E+07 y	561.100	1.0000	0.8390	0.6168
			934.510	1.0000		
92 Tc	43	4.400 m	85.000	0.1210	2.0713	1.5854
			147.900	0.7600		
			243.700	0.1380		
			329.300	0.8000		
			511.000	1.8876		
			773.100	1.0000		
			1337.100	0.0100		
			1509.600	1.0000		
			1567.900	0.0070		
			1596.000	0.0025		
			1703.300	0.0090		
			1785.900	0.0030		
			2158.800	0.0180		
			2308.300	0.0140		
			2511.500	0.0031		
			2705.000	0.0066		
			2853.500	0.0050		
			2873.400	0.0050		
			2904.200	0.0030		
			3026.100	0.0053		
			3134.300	0.0010		
			3911.900	0.0019		
			4085.500	0.0015		
			4135.900	0.0015		
			4368.400	0.0035		
			4572.300	0.0030		
92 Ru	44	3.650 m	47.460	0.2700	1.0295	0.8211
			56.340	0.0870		
			134.600	0.6480		
			213.810	0.9500		
			259.270	0.9100		
			306.800	0.0031		
			410.400	0.0178		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
92 Ru	44	3.650 m	436.500	0.0044	1.0295	0.8211
			450.700	0.0674		
			511.000	1.0495		
			570.100	0.0062		
			585.000	0.0058		
			594.300	0.0058		
			618.300	0.0034		
			634.800	0.0028		
			656.300	0.0019		
			663.600	0.0048		
			828.000	0.0047		
			839.100	0.0032		
			867.000	0.1130		
			903.600	0.0078		
			910.200	0.0321		
			938.100	0.0024		
			945.000	0.0270		
			947.200	0.0270		
			958.800	0.0037		
			968.000	0.0038		
			974.300	0.0031		
			1024.200	0.0054		
			1064.100	0.0040		
			1118.700	0.0024		
			1219.600	0.0600		
			1229.100	0.0332		
			1268.900	0.0034		
			1394.900	0.0048		
			1403.600	0.0161		
			1460.100	0.0063		
			1517.600	0.0190		
			1560.700	0.0074		
			1604.700	0.0361		
			1679.600	0.0910		
			1738.500	0.0032		
			1814.000	0.0019		
			1882.500	0.0019		
			1900.600	0.0037		
			1928.500	0.0018		
			2059.700	0.0342		
			2194.300	0.0080		
			2241.300	0.0026		
			2302.300	0.0104		
			2427.500	0.0067		
			2471.200	0.0020		
93 Kr	36	1.289 s	57.110	0.0026	1.0298	0.7872
			70.570	0.0157		
			182.020	0.0550		
			239.260	0.0016		
			252.510	0.2000		
			253.420	0.4200		
			254.830	0.0071		
			266.830	0.2100		
			316.720	0.0025		
			323.890	0.2460		
			399.010	0.0012		
			496.560	0.0184		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
93 Kr	36	1.289 s	529.590	0.0050	1.0298	0.7872
			555.410	0.0011		
			567.050	0.0017		
			570.160	0.0122		
			616.510	0.0010		
			644.780	0.0028		
			686.510	0.0014		
			722.680	0.0028		
			733.720	0.0090		
			770.700	0.0014		
			777.570	0.0020		
			820.450	0.0379		
			844.120	0.0057		
			895.050	0.0018		
			921.190	0.0023		
			965.010	0.0022		
			976.080	0.0072		
			1005.650	0.0017		
			1026.190	0.0221		
			1046.570	0.0012		
			1054.550	0.0011		
			1058.710	0.0031		
			1060.530	0.0039		
			1083.420	0.0083		
			1097.140	0.0013		
			1139.170	0.0020		
			1157.090	0.0032		
			1191.490	0.0024		
			1214.980	0.0180		
			1235.500	0.0014		
			1238.760	0.0113		
			1290.540	0.0024		
			1296.080	0.0192		
			1309.510	0.0011		
			1313.440	0.0030		
			1318.380	0.0093		
			1350.240	0.0076		
			1360.260	0.0023		
			1364.770	0.0070		
			1374.780	0.0043		
			1382.700	0.0019		
			1387.920	0.0138		
			1421.790	0.0098		
			1435.350	0.0103		
			1445.640	0.0021		
			1458.500	0.0040		
			1471.300	0.0039		
			1505.760	0.0229		
			1508.410	0.0022		
			1525.890	0.0022		
			1528.900	0.0015		
			1543.150	0.0035		
			1556.320	0.0025		
			1563.090	0.0096		
			1586.890	0.0086		
			1596.200	0.0140		
			1613.330	0.0035		
			1627.100	0.0202		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
93 Kr	36	1.289 s	1638.040	0.0051	1.0299	0.7872
			1641.080	0.0148		
			1651.870	0.0071		
			1662.740	0.0042		
			1685.070	0.0056		
			1687.400	0.0015		
			1697.840	0.0143		
			1704.450	0.0026		
			1710.780	0.0051		
			1713.400	0.0031		
			1742.490	0.0130		
			1745.280	0.0042		
			1755.860	0.0032		
			1779.680	0.0059		
			1785.800	0.0013		
			1788.960	0.0032		
			1794.800	0.0089		
			1798.300	0.0018		
			1803.710	0.0023		
			1822.300	0.0017		
			1823.800	0.0034		
			1840.100	0.0027		
			1862.680	0.0027		
			1886.790	0.0071		
			1929.700	0.0032		
			1943.540	0.0048		
			1957.100	0.0036		
			1961.830	0.0182		
			1989.300	0.0029		
			1994.410	0.0027		
			2011.680	0.0023		
			2018.870	0.0143		
			2035.260	0.0184		
			2082.620	0.0030		
			2088.240	0.0028		
			2181.540	0.0118		
			2239.200	0.0018		
			2342.400	0.0018		
			2349.960	0.0750		
			2366.000	0.0013		
			2368.500	0.0014		
			2411.440	0.0032		
			2424.260	0.0018		
			2491.200	0.0047		
			2496.050	0.0234		
			2521.470	0.0048		
			2531.900	0.0013		
			2548.020	0.0063		
			2557.260	0.0060		
			2561.330	0.0102		
			2589.180	0.0052		
			2602.610	0.0428		
			2606.650	0.0073		
			2663.490	0.0052		
			2678.000	0.0027		
			2700.500	0.0022		
			2720.200	0.0020		
			2739.140	0.0052		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
93 Kr	36	1.289 s	2755.620	0.0022	1.0298	0.7872
			2772.900	0.0021		
			2782.260	0.0056		
			2796.560	0.0037		
			2809.920	0.0045		
			2826.620	0.0020		
			2838.500	0.0018		
			2846.000	0.0070		
			2852.600	0.0019		
			2855.950	0.0221		
			2913.500	0.0021		
			2944.600	0.0018		
			2948.320	0.0062		
			2956.680	0.0061		
			2972.220	0.0045		
			2998.500	0.0064		
			3000.500	0.0034		
			3014.700	0.0032		
			3026.500	0.0018		
			3105.400	0.0030		
			3150.800	0.0021		
			3196.800	0.0015		
			3214.500	0.0022		
			3220.300	0.0018		
			3226.700	0.0101		
			3229.900	0.0015		
			3250.300	0.0016		
			3285.300	0.0018		
			3294.800	0.0021		
			3298.310	0.0065		
			3303.900	0.0011		
			3307.200	0.0010		
			3356.000	0.0022		
			3358.800	0.0012		
			3379.700	0.0017		
			3408.090	0.0046		
			3412.700	0.0014		
			3453.300	0.0021		
			3460.700	0.0071		
			3464.400	0.0032		
			3467.200	0.0027		
			3471.300	0.0015		
			3482.400	0.0012		
			3582.700	0.0016		
			3634.700	0.0019		
			3645.900	0.0024		
			3649.200	0.0031		
			3655.500	0.0014		
			3705.870	0.0030		
			3776.000	0.0015		
			3887.100	0.0013		
			4032.880	0.0022		
93 Rb	37	5.860 s	213.390	0.0480	0.5525	0.4095
			219.160	0.0197		
			432.510	0.1250		
			595.870	0.0016		
			610.100	0.0013		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
93 Rb	37	5.860 s	661.640	0.0020	0.5525	0.4095
			709.950	0.0380		
			793.650	0.0077		
			822.410	0.0012		
			910.910	0.0010		
			929.040	0.0031		
			934.700	0.0023		
			986.050	0.0489		
			1068.510	0.0044		
			1096.710	0.0029		
			1100.630	0.0013		
			1130.120	0.0014		
			1138.000	0.0015		
			1142.580	0.0023		
			1148.180	0.0110		
			1150.380	0.0033		
			1208.550	0.0011		
			1238.300	0.0106		
			1284.000	0.0011		
			1315.640	0.0027		
			1332.970	0.0076		
			1349.670	0.0010		
			1359.920	0.0015		
			1365.360	0.0023		
			1385.210	0.0410		
			1388.700	0.0016		
			1437.100	0.0030		
			1470.130	0.0014		
			1494.850	0.0017		
			1501.180	0.0025		
			1507.770	0.0017		
			1533.800	0.0010		
			1547.780	0.0020		
			1562.910	0.0072		
			1578.000	0.0011		
			1594.610	0.0042		
			1612.870	0.0120		
			1635.200	0.0027		
			1662.160	0.0026		
			1684.760	0.0039		
			1749.610	0.0018		
			1793.620	0.0019		
			1803.600	0.0017		
			1808.500	0.0201		
			1812.760	0.0018		
			1821.860	0.0041		
			1831.100	0.0015		
			1836.400	0.0020		
			1838.000	0.0034		
			1869.690	0.0136		
			1886.600	0.0010		
			1892.700	0.0013		
			1900.940	0.0033		
			1910.720	0.0082		
			1927.640	0.0054		
			1933.900	0.0018		
			1956.400	0.0013		
			1978.280	0.0057		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
93 Rb	37	5.860 s	1991.800	0.0012	0.5525	0.4095
			2026.880	0.0017		
			2043.820	0.0022		
			2054.060	0.0096		
			2058.780	0.0025		
			2068.360	0.0010		
			2087.400	0.0013		
			2147.600	0.0021		
			2168.240	0.0032		
			2206.200	0.0013		
			2229.440	0.0067		
			2258.400	0.0019		
			2262.000	0.0010		
			2270.200	0.0039		
			2292.800	0.0038		
			2349.580	0.0044		
			2359.450	0.0023		
			2386.720	0.0016		
			2418.220	0.0024		
			2451.700	0.0012		
			2454.970	0.0035		
			2461.980	0.0034		
			2491.200	0.0028		
			2505.200	0.0059		
			2523.700	0.0017		
			2550.060	0.0019		
			2568.590	0.0027		
			2602.380	0.0025		
			2638.100	0.0020		
			2646.600	0.0012		
			2652.620	0.0022		
			2661.080	0.0022		
			2704.970	0.0074		
			2724.600	0.0040		
			2766.480	0.0029		
			2799.900	0.0011		
			2861.340	0.0080		
			2869.230	0.0032		
			2880.480	0.0027		
			2886.300	0.0024		
			2890.400	0.0029		
			2903.600	0.0016		
			2954.930	0.0032		
			2958.100	0.0012		
			3113.850	0.0027		
			3172.100	0.0014		
			3226.400	0.0022		
			3366.600	0.0016		
			3370.970	0.0081		
			3403.560	0.0033		
			3458.190	0.0267		
			3477.390	0.0019		
			3501.900	0.0041		
			3544.000	0.0011		
			3547.200	0.0010		
			3572.050	0.0021		
			3664.750	0.0039		
			3721.600	0.0011		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R²m2/h/Ci	T Rem/h/Ci
93 Rb	37	5.860 s	3770.400	0.0013	0.5525	0.4095
			3789.300	0.0011		
			3803.980	0.0112		
			3867.600	0.0185		
			3876.700	0.0015		
			3883.950	0.0032		
			3890.500	0.0015		
			3934.340	0.0070		
			4017.550	0.0030		
			4271.230	0.0024		
			4281.900	0.0012		
			4875.100	0.0013		
93 Sr	38	7.320 m	166.600	0.0061	1.1393	0.8452
			168.690	0.1800		
			260.120	0.0720		
			285.650	0.0027		
			332.040	0.0035		
			346.490	0.0321		
			377.360	0.0145		
			406.710	0.0042		
			424.700	0.0025		
			428.030	0.0015		
			432.670	0.0145		
			440.800	0.0019		
			446.200	0.0231		
			481.960	0.0111		
			483.730	0.0163		
			486.700	0.0012		
			518.500	0.0013		
			541.890	0.0071		
			545.810	0.0039		
			559.920	0.0020		
			571.960	0.0021		
			586.500	0.0044		
			590.280	0.6600		
			593.810	0.0109		
			596.150	0.0130		
			610.930	0.0106		
			630.970	0.0019		
			633.500	0.0011		
			650.560	0.0019		
			658.560	0.0041		
			663.580	0.0161		
			687.790	0.0065		
			690.060	0.0099		
			692.000	0.0022		
			710.400	0.2130		
			716.800	0.0029		
			718.330	0.0146		
			771.190	0.0114		
			776.070	0.0026		
			782.830	0.0021		
			788.680	0.0075		
			791.100	0.0025		
			795.290	0.0023		
			834.890	0.0164		
			837.850	0.0012		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
93 Sr	38	7.320 m	858.470	0.0071	1.1393	0.8452
			875.730	0.2390		
			888.130	0.2160		
			900.980	0.0068		
			910.180	0.0080		
			922.700	0.0033		
			927.690	0.0063		
			930.910	0.0040		
			952.580	0.0011		
			991.590	0.0012		
			1035.500	0.0020		
			1040.630	0.0313		
			1055.130	0.0034		
			1064.370	0.0037		
			1077.860	0.0023		
			1094.000	0.0172		
			1104.690	0.0015		
			1122.480	0.0392		
			1136.770	0.0019		
			1180.760	0.0024		
			1196.230	0.0096		
			1215.480	0.0244		
			1239.150	0.0012		
			1243.410	0.0078		
			1266.380	0.0109		
			1269.470	0.0700		
			1277.990	0.0085		
			1308.600	0.0039		
			1321.240	0.0255		
			1332.500	0.0050		
			1334.500	0.0066		
			1378.980	0.0035		
			1387.110	0.0339		
			1434.010	0.0088		
			1438.930	0.0049		
			1469.500	0.0051		
			1492.130	0.0054		
			1520.100	0.0031		
			1551.590	0.0100		
			1609.770	0.0019		
			1634.050	0.0142		
			1647.530	0.0087		
			1668.700	0.0016		
			1684.840	0.0070		
			1694.070	0.0253		
			1699.060	0.0326		
			1706.590	0.0108		
			1765.360	0.0104		
			1774.830	0.0016		
			1811.450	0.0138		
			1816.120	0.0023		
			1894.100	0.0012		
			1907.730	0.0017		
			1928.790	0.0114		
			1944.750	0.0055		
			2010.800	0.0012		
			2054.680	0.0013		
			2063.640	0.0061		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
93 Sr	38	7.320 m	2104.780	0.0031	1.1393	0.8452
			2179.490	0.0029		
			2230.270	0.0152		
			2296.130	0.0072		
			2364.720	0.0154		
			2416.300	0.0011		
			2543.840	0.0296		
			2574.200	0.0013		
			2688.650	0.0208		
			2828.540	0.0017		
			2985.720	0.0019		
			3006.860	0.0012		
93 Y	39	10.100 h	266.870	0.0680	0.0428	0.0333
			680.300	0.0061		
			947.100	0.0194		
			1203.300	0.0010		
			1425.500	0.0024		
			1450.500	0.0033		
			1917.800	0.0140		
			2184.700	0.0016		
			2190.800	0.0017		
93 Mo	42	6.850 h	113.920	0.0071	1.1763	0.8785
			263.000	0.5350		
			684.700	0.9200		
			1364.700	0.0062		
			1477.200	1.0000		
94 Y	39	19.100 m	381.750	0.0228	0.5898	0.4319
			550.100	0.0600		
			588.000	0.0037		
			694.000	0.0022		
			750.520	0.0290		
			918.240	0.7350		
			1139.100	0.0710		
			1162.200	0.0110		
			1232.800	0.0132		
			1325.000	0.0073		
			1363.500	0.0132		
			1402.700	0.0169		
			1447.300	0.0051		
			1668.600	0.0300		
			1892.800	0.0110		
			1915.600	0.0206		
			2140.400	0.0100		
			2444.000	0.0015		
			2467.000	0.0088		
			2492.000	0.0029		
			2527.600	0.0029		
			2629.000	0.0037		
			2834.000	0.0066		
94 Nb m	41	6.260 m	871.099	0.0048	0.0023	0.0017
94 Nb	41	20313.904 y	702.627	1.0000	0.8868	0.6453
			871.099	1.0000		
94 Tc m	43	52.000 m	511.000	1.4064	1.0430	0.7747

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
94 Tc m	43	52.000 m	871.030	0.9410	1.0430	0.7747
			993.100	0.0230		
			1196.100	0.0075		
			1264.900	0.0022		
			1521.800	0.0450		
			1868.680	0.0570		
			2393.200	0.0047		
			2529.800	0.0031		
			2739.900	0.0390		
			3128.600	0.0141		
94 Tc	43	4.883 h	83.000	0.0020	1.4953	1.0910
			449.100	0.0330		
			511.000	0.2206		
			532.100	0.0240		
			702.640	0.9980		
			742.300	0.0120		
			849.700	0.9770		
			871.030	1.0000		
			916.120	0.0760		
			1591.900	0.0230		
			1765.600	0.0029		
94 Ru	44	51.800 m	367.200	0.7140	0.2955	0.2374
			525.000	0.0140		
			892.100	0.2860		
95 Y	39	10.700 m	396.800	0.0025	0.3979	0.2924
			432.400	0.0139		
			569.200	0.0012		
			580.500	0.0011		
			632.500	0.0022		
			954.200	0.1320		
			1002.000	0.0026		
			1048.500	0.0071		
			1174.000	0.0049		
			1294.000	0.0015		
			1324.300	0.0370		
			1357.200	0.0050		
			1418.800	0.0036		
			1511.900	0.0048		
			1618.500	0.0120		
			1683.700	0.0036		
			1721.400	0.0025		
			1805.900	0.0103		
			1813.500	0.0015		
			1856.000	0.0015		
			1892.800	0.0046		
			1904.500	0.0013		
			1925.500	0.0045		
			1940.600	0.0191		
			1955.900	0.0026		
			2176.000	0.0570		
			2252.900	0.0032		
			2295.900	0.0100		
			2373.300	0.0057		
			2498.100	0.0040		
			2633.000	0.0350		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
95 Y	39	10.700 m	2760.000	0.0020	0.3979	0.2923
			3129.800	0.0048		
			3253.200	0.0088		
			3452.000	0.005C		
			3577.000	0.053C		
			3684.000	0.0026		
			3887.000	0.0020		
			3924.000	0.0013		
			4068.000	0.0013		
95 Zr	40	63.980 d	724.230	0.4450	0.4195	0.3051
			756.740	0.5500		
95 Nb m	41	3.608 d	234.700	0.2610	0.0331	0.0298
95 Nb	41	35.150 d	765.830	1.0000	0.4338	0.3153
96 Nb	41	23.350 h	219.100	0.0390	1.4153	1.0441
			241.400	0.0400		
			314.600	0.0010		
			349.700	0.0075		
			350.100	0.0115		
			352.560	0.0085		
			371.810	0.0290		
			434.790	0.0055		
			460.030	0.2910		
			480.680	0.0650		
			568.860	0.5750		
			591.200	0.0100		
			593.300	0.0032		
			719.540	0.0750		
			721.800	0.0080		
			778.220	1.0000		
			810.250	0.1020		
			812.400	0.0350		
			847.600	0.0170		
			849.900	0.2140		
			1091.310	0.5100		
			1126.800	0.0055		
			1200.190	0.2070		
			1441.080	0.0041		
			1497.680	0.0310		
96 Tc m	43	51.500 m	480.700	0.0034	0.0220	0.0161
			719.550	0.0029		
			778.220	0.0230		
			847.600	0.0012		
			849.850	0.0028		
			1200.150	0.0110		
			1497.650	0.0012		
96 Tc	43	4.280 d	314.270	0.0244	1.3965	1.0172
			316.500	0.0140		
			434.700	0.0075		
			460.000	0.0043		
			535.780	0.0040		
			568.880	0.0092		
			591.300	0.0010		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
96 Tc	43	4.280 d	719.500	0.0020	1.3965	1.0172
			721.500	0.0012		
			778.220	1.0000		
			812.540	0.8220		
			849.860	0.9780		
			885.400	0.0010		
			1091.300	0.0100		
			1126.850	0.1520		
			1200.170	0.0037		
97 Sr	38	0.400 s	216.400	0.0126	0.9153	0.6824
			307.100	0.1428		
			310.600	0.0168		
			365.800	0.0588		
			412.500	0.0300		
			474.100	0.0280		
			479.900	0.0322		
			528.200	0.0168		
			652.200	0.1428		
			697.300	0.0571		
			767.000	0.0200		
			801.400	0.0655		
			892.000	0.0515		
			953.800	0.2688		
			1258.000	0.1200		
			1301.700	0.0200		
			1515.000	0.0280		
			1524.600	0.0280		
			1905.100	0.2800		
			2121.300	0.0300		
			2212.100	0.1176		
			2287.500	0.0420		
97 Y m	39	0.210 s	161.400	0.0180	0.9670	0.7113
			296.900	0.0135		
			375.300	0.0432		
			407.100	0.0559		
			420.100	0.0072		
			427.400	0.0090		
			456.700	0.0171		
			542.600	0.0090		
			594.700	0.0090		
			667.300	0.0630		
			756.000	0.0360		
			938.000	0.0180		
			970.000	0.3883		
			999.500	0.0252		
			1103.000	0.9000		
			1192.800	0.0144		
			1244.100	0.0784		
			1264.200	0.0540		
			1400.000	0.0450		
97 Y	39	3.700 s	161.400	0.1400	0.7660	0.5651
			296.900	0.0127		
			544.800	0.0090		
			594.700	0.0036		
			756.000	0.0100		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
97 Y	39	3.700 s	1103.000	0.0500	0.7660	0.5651
			1264.200	0.0018		
			1291.200	0.0574		
			1344.000	0.0090		
			1400.000	0.0452		
			1428.900	0.0072		
			1639.800	0.0083		
			1887.400	0.0186		
			1996.600	0.0748		
			2057.300	0.0094		
			2743.100	0.0655		
			3287.600	0.1800		
			3401.300	0.1420		
			3549.500	0.0311		
97 Zr	40	16.900 h	218.870	0.0018	0.0953	0.0716
			254.150	0.0125		
			272.270	0.0025		
			330.430	0.0011		
			355.390	0.0227		
			400.390	0.0032		
			507.630	0.0510		
			513.380	0.0056		
			602.410	0.0139		
			690.630	0.0025		
			699.200	0.0012		
			703.800	0.0093		
			804.530	0.0065		
			829.800	0.0022		
			854.900	0.0033		
			971.390	0.0029		
			1021.300	0.0134		
			1110.450	0.0011		
			1147.950	0.0260		
			1276.090	0.0097		
			1362.660	0.0134		
			1750.460	0.0134		
			1851.550	0.0035		
97 Nb m	41	60.000 s	743.360	0.9795	0.4136	0.3008
97 Nb	41	1.202 h	480.900	0.0015	0.3732	0.2730
			657.920	0.9834		
			1268.630	0.0016		
			1515.640	0.0012		
97 Ru	44	2.900 d	108.800	0.0011	0.1205	0.1107
			215.680	0.8600		
			324.550	0.1020		
			460.550	0.0012		
			569.270	0.0089		
98 Y	39	0.650 s	213.100	0.0148	0.3901	0.2876
			268.600	0.0258		
			367.600	0.0025		
			368.500	0.0018		
			386.100	0.0030		
			521.600	0.0074		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
98 Y	39	0.650 s	547.500	0.0030	0.3901	0.2876
			600.000	0.0030		
			636.200	0.0050		
			736.700	0.0043		
			840.300	0.0030		
			890.300	0.0037		
			1222.800	0.1230		
			1590.700	0.0500		
			1744.100	0.0141		
			2305.500	0.0068		
			2420.600	0.0166		
			2573.900	0.0086		
			2941.300	0.0600		
			3064.400	0.0050		
			3203.700	0.0080		
			3228.300	0.0141		
			3310.000	0.0246		
			3375.700	0.0068		
			3468.600	0.0068		
			4450.100	0.0350		
98 Y m	39	2.000 s	241.500	0.0700	1.6424	1.2113
			253.100	0.0415		
			368.500	0.0138		
			583.300	0.1800		
			620.500	0.7479		
			647.300	0.5540		
			752.600	0.0700		
			1222.800	0.9700		
			1590.700	0.0277		
			1787.300	0.0415		
			1801.600	0.4570		
98 Nb	41	2.800 s	644.600	0.0080	0.0638	0.0466
			735.300	0.0550		
			787.500	0.0300		
			971.300	0.0080		
			1023.500	0.0150		
			1250.200	0.0020		
			1419.600	0.0040		
			1432.000	0.0080		
			1758.800	0.0014		
			1821.000	0.0010		
98 Nb m	41	51.500 m	172.000	0.0260	1.2964	0.9510
			335.500	0.1010		
			644.600	0.0450		
			713.600	0.0870		
			722.300	0.7700		
			787.200	0.9500		
			792.000	0.0500		
			833.300	0.1020		
			995.000	0.0200		
			1025.000	0.0200		
			1169.000	0.1750		
			1258.000	0.0100		
			1334.000	0.0100		
			1431.000	0.0300		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
98 Nb m	41	51.500 m	1435.000	0.0400	1.2964	0.9510
			1511.000	0.0610		
			1548.000	0.0550		
			1701.000	0.0930		
			1946.000	0.0150		
			1981.000	0.0280		
			2021.000	0.0100		
			2235.000	0.0100		
98 Tc	43	4.203E+06 y	652.410	1.0000	0.8059	0.5878
			745.350	1.0200		
98 Rh	45	9.050 m	511.000	1.7700	0.9812	0.7345
			597.700	0.0080		
			652.900	0.9420		
			745.400	0.0530		
			762.300	0.0160		
			1164.400	0.0450		
			1414.900	0.0100		
			1817.000	0.0470		
99 Y	39	1.500 s	121.700	0.4780	0.3939	0.3023
			130.000	0.0670		
			194.000	0.0240		
			276.400	0.0290		
			406.000	0.0190		
			415.200	0.0072		
			453.800	0.0530		
			472.300	0.0100		
			536.200	0.0960		
			575.400	0.1190		
			600.000	0.0670		
			602.600	0.0480		
			614.000	0.0480		
			639.900	0.0380		
			724.200	0.2200		
			730.000	0.0190		
			782.200	0.0530		
			930.100	0.0480		
			1013.800	0.0860		
99 Zr	40	2.100 s	56.000	0.0280	0.4906	0.3779
			81.900	0.0465		
			179.200	0.0500		
			387.200	0.0963		
			414.800	0.0500		
			461.800	0.1200		
			469.300	0.5600		
			489.900	0.0084		
			545.900	0.4777		
			581.000	0.0056		
			594.100	0.2760		
			627.700	0.0180		
			650.000	0.0224		
			961.000	0.0056		
99 Nb	41	2.600 m	98.000	0.1200	0.3906	0.2945
			137.500	0.0264		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
99 Nb	41	2.600 m	173.500	0.0066	0.3906	0.2945
			197.000	0.0042		
			254.000	0.0684		
			264.000	0.0132		
			272.500	0.0030		
			279.000	0.0048		
			352.000	0.0500		
			365.500	0.0024		
			379.500	0.0042		
			393.000	0.0036		
			427.000	0.0072		
			451.000	0.0240		
			498.000	0.0036		
			508.500	0.0036		
			525.000	0.0156		
			535.000	0.0024		
			548.500	0.0114		
			554.500	0.0100		
			593.000	0.0084		
			598.000	0.0144		
			631.000	0.0228		
			655.500	0.0100		
			673.500	0.0132		
			793.000	0.0240		
			856.000	0.0018		
			868.000	0.0018		
			889.000	0.0066		
			905.000	0.0048		
			945.000	0.0114		
			1027.000	0.0066		
			1100.000	0.0078		
			1112.000	0.0042		
			1259.000	0.0084		
			1293.000	0.0060		
			1317.000	0.0084		
			1475.000	0.0132		
			1698.000	0.0132		
			1735.000	0.0100		
			1886.000	0.0042		
			1898.000	0.0042		
			2010.000	0.0078		
			2241.000	0.0096		
			2544.000	0.0120		
			2642.000	0.0600		
			2693.000	0.0168		
			2734.000	0.0180		
			2791.000	0.0090		
			2854.000	0.0576		
			2918.000	0.0030		
			2927.000	0.0030		
			3017.000	0.0048		
99 Mo	42	2.750 d	40.587	0.0115	0.0828	0.0628
			140.466	0.0495		
			181.057	0.0606		
			366.421	0.0119		
			739.500	0.1219		
			777.921	0.0432		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
99 Mo	42	2.750 d	822.972	0.0013	0.0828	0.0628
99 Tc m	43	6.020 h	140.466	0.8897	0.0590	0.0614
99 Rh m	45	4.700 h	89.600	0.0590	0.3158	0.2559
			232.000	0.0020		
			251.000	0.0028		
			277.200	0.0170		
			322.000	0.0130		
			340.600	0.6400		
			379.000	0.0020		
			486.200	0.0060		
			502.000	0.0026		
			528.200	0.0200		
			575.000	0.0042		
			618.000	0.1250		
			686.000	0.0090		
			718.000	0.0080		
			919.300	0.0100		
			936.700	0.0290		
			1260.700	0.1550		
			1761.000	0.0016		
99 Rh	45	16.000 d	89.400	0.8500	0.3103	0.2557
			175.200	0.0150		
			232.300	0.0029		
			232.400	0.0029		
			295.700	0.0100		
			322.400	0.0370		
			353.000	0.3190		
			442.800	0.0220		
			486.500	0.0036		
			527.700	0.4070		
			575.200	0.0019		
			618.000	0.0480		
			734.200	0.0025		
			763.900	0.0036		
			764.400	0.0036		
			806.600	0.0140		
			850.300	0.0045		
			897.200	0.0085		
			941.500	0.0140		
			1000.200	0.0080		
			1061.200	0.0022		
			1089.400	0.0040		
			1208.300	0.0027		
			1292.000	0.0029		
			1323.900	0.0027		
			1382.900	0.0012		
			1442.000	0.0014		
			1532.900	0.0053		
			1572.400	0.0053		
			1618.000	0.0040		
			1749.000	0.0024		
			2058.600	0.0013		
99 Pd	46	21.400 m	136.000	0.8460	0.4009	0.3162
			236.000	0.0017		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
99 Pd	46	21.400 m	263.600	0.1560	0.4009	0.3182
			293.300	0.0140		
			368.000	0.0015		
			386.700	0.0290		
			399.800	0.0370		
			410.300	0.0140		
			427.300	0.0200		
			524.000	0.0035		
			627.000	0.0029		
			646.000	0.0060		
			650.400	0.0140		
			652.800	0.0150		
			653.000	0.0270		
			662.400	0.0039		
			673.400	0.0700		
			684.800	0.0010		
			702.700	0.0025		
			718.700	0.0044		
			740.000	0.0017		
			758.500	0.0016		
			767.200	0.0023		
			786.600	0.0350		
			809.800	0.0200		
			817.600	0.0100		
			852.300	0.0030		
			886.500	0.0035		
			910.900	0.0029		
			954.000	0.0018		
			967.000	0.0100		
			1013.400	0.0150		
			1022.000	0.0028		
			1046.600	0.0045		
			1071.700	0.0090		
			1095.000	0.0025		
			1099.600	0.0100		
			1124.400	0.0023		
			1157.200	0.0069		
			1165.600	0.0077		
			1201.000	0.0010		
			1219.500	0.0030		
			1231.000	0.0075		
			1274.200	0.0015		
			1302.200	0.0024		
			1325.000	0.0086		
			1335.600	0.0480		
			1350.900	0.0018		
			1391.600	0.0014		
			1422.200	0.0017		
			1429.400	0.0020		
			1471.200	0.0023		
			1504.600	0.0056		
			1515.000	0.0020		
			1528.000	0.0029		
			1540.800	0.0016		
			1559.600	0.0016		
			1587.600	0.0013		
			1614.000	0.0049		
			1680.500	0.0064		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
99 Pd	46	21.400 m	1697.300	0.0057	0.4009	0.3182
			1717.600	0.0066		
			1735.000	0.0010		
			1754.000	0.0014		
			1789.600	0.0022		
			1804.200	0.0018		
			1840.000	0.0019		
			1851.600	0.0047		
			1863.600	0.0019		
			1879.600	0.0017		
			1904.700	0.0068		
			1924.800	0.0048		
			1943.400	0.0027		
			1999.000	0.0080		
			2142.400	0.0043		
			2154.500	0.0017		
			2182.000	0.0030		
			2188.400	0.0020		
			2246.200	0.0085		
			2273.300	0.0036		
			2278.200	0.0019		
			2324.600	0.0057		
			2508.700	0.0012		
			2536.300	0.0060		
			2557.800	0.0019		
			2633.600	0.0010		
			2694.900	0.0014		
			2847.300	0.0016		
100 Tc	43	15.800 s	539.590	0.0700	0.0445	0.0332
			590.830	0.0570		
			1512.200	0.0044		
100 Rh	45	20.800 h	229.100	0.0010	1.3239	0.9811
			302.300	0.0066		
			370.600	0.0041		
			398.700	0.0014		
			403.500	0.0019		
			446.200	0.1120		
			465.800	0.0010		
			499.800	0.0014		
			519.100	0.0072		
			539.600	0.7800		
			588.200	0.0410		
			590.800	0.0141		
			599.900	0.0027		
			604.900	0.0037		
			650.900	0.0052		
			654.500	0.0045		
			686.900	0.0066		
			734.700	0.0024		
			736.900	0.0010		
			748.500	0.0082		
			817.000	0.0060		
			822.500	0.2010		
			903.000	0.0013		
			1034.300	0.0141		
			1107.100	0.1320		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
100 Rh	45	20.800 h	1155.100	0.0014	1.3239	0.9811
			1325.700	0.0031		
			1341.600	0.0484		
			1362.100	0.1510		
			1386.500	0.0039		
			1512.200	0.0013		
			1553.400	0.2050		
			1559.700	0.0062		
			1627.500	0.0157		
			1701.000	0.0023		
			1709.000	0.0023		
			1865.200	0.0039		
			1929.700	0.1220		
			1976.800	0.0031		
			2167.000	0.0019		
			2194.000	0.0013		
			2376.100	0.3500		
			2395.700	0.0010		
			2469.400	0.0019		
			2530.200	0.0270		
			2613.300	0.0010		
			2784.500	0.0024		
101 Zr	40	3.300 s	293.000	1.0000	0.1981	0.1846
			400.000	0.1500		
101 Mo	42	14.620 m	80.920	0.0350	0.6829	0.5097
			104.700	0.0015		
			105.950	0.0023		
			191.930	0.1820		
			195.940	0.0280		
			212.000	0.0043		
			318.000	0.0024		
			327.850	0.0019		
			333.700	0.0066		
			352.800	0.0011		
			371.200	0.0019		
			381.000	0.0035		
			398.850	0.0079		
			408.590	0.0140		
			421.410	0.0052		
			432.900	0.0011		
			448.630	0.0062		
			452.600	0.0014		
			469.300	0.0011		
			499.590	0.0134		
			505.880	0.1140		
			510.360	0.0032		
			512.710	0.0120		
			515.150	0.0073		
			524.200	0.0012		
			533.550	0.0038		
			571.300	0.0016		
			590.820	0.1940		
			608.310	0.0098		
			642.700	0.0110		
			660.800	0.0026		
			695.530	0.0660		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
101 Mo	42	14.620 m	701.800	0.0040	0.6829	0.5097
			713.020	0.0310		
			732.900	0.0023		
			774.100	0.0035		
			789.800	0.0012		
			804.250	0.0086		
			815.200	0.0014		
			853.100	0.0024		
			859.300	0.0014		
			871.050	0.0166		
			877.380	0.0310		
			883.250	0.0064		
			887.900	0.0015		
			887.900	0.0021		
			895.900	0.0015		
			903.600	0.0019		
			934.200	0.0370		
			943.200	0.0015		
			980.700	0.0026		
			987.900	0.0018		
			1010.000	0.0300		
			1010.000	0.0085		
			1012.350	0.1140		
			1018.900	0.0047		
			1018.900	0.0102		
			1049.900	0.0032		
			1064.500	0.0027		
			1066.000	0.0015		
			1160.930	0.0360		
			1168.500	0.0017		
			1186.620	0.0097		
			1199.920	0.0162		
			1210.200	0.0013		
			1251.100	0.0420		
			1291.900	0.0015		
			1303.920	0.0239		
			1314.000	0.0013		
			1323.400	0.0014		
			1326.100	0.0027		
			1337.100	0.0019		
			1345.790	0.0095		
			1355.600	0.0162		
			1377.300	0.0021		
			1382.150	0.0111		
			1394.500	0.0057		
			1413.500	0.0042		
			1418.000	0.0080		
			1430.600	0.0028		
			1433.400	0.0075		
			1440.600	0.0010		
			1514.400	0.0016		
			1518.900	0.0025		
			1522.400	0.0026		
			1532.270	0.0540		
			1547.500	0.0015		
			1589.600	0.0024		
			1599.050	0.0157		
			1662.200	0.0050		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
101 Mo	42	14.620 m	1662.200	0.0014	0.6829	0.5097
			1673.560	0.0153		
			1712.800	0.0019		
			1754.800	0.0042		
			1759.900	0.0064		
			1759.900	0.0037		
			1767.400	0.0012		
			1840.400	0.0111		
			1840.400	0.0015		
			2031.950	0.0610		
			2040.900	0.0200		
			2046.800	0.0011		
			2088.400	0.0068		
			2113.700	0.0055		
			2221.600	0.0015		
101 Tc	43	14.200 m	127.210	0.0255	0.1844	0.1690
			179.590	0.0055		
			184.110	0.0154		
			233.700	0.0026		
			238.300	0.0027		
			306.860	0.8800		
			311.300	0.0031		
			531.300	0.0101		
			545.110	0.0600		
			626.980	0.0047		
			715.600	0.0062		
			720.000	0.0022		
			842.700	0.0020		
101 Rh m	45	4.340 d	127.220	0.0057	0.1641	0.1528
			157.320	0.0023		
			179.550	0.0049		
			184.060	0.0014		
			233.550	0.0017		
			238.010	0.0020		
			306.770	0.8700		
			544.850	0.0401		
101 Rh	45	3.202 y	127.210	0.6500	0.1278	0.1248
			137.600	0.0019		
			198.000	0.6300		
			217.000	0.0058		
			295.000	0.0065		
			325.200	0.1190		
			344.000	0.0019		
			422.500	0.0034		
101 Pd	46	8.270 h	269.660	0.0560	0.1355	0.1082
			296.250	0.1800		
			320.640	0.0058		
			355.140	0.0023		
			427.540	0.0010		
			453.570	0.0059		
			565.200	0.0020		
			565.770	0.0295		
			590.360	0.1110		
			723.000	0.0027		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
101 Pd	46	8.270 h	723.800	0.0193	0.1355	0.1082
			748.330	0.0047		
			881.320	0.0011		
			992.800	0.0086		
			1177.590	0.0035		
			1202.030	0.0140		
			1218.270	0.0050		
			1289.030	0.0216		
			1311.300	0.0018		
102 Tc	43	5.280 s	468.000	0.0880	0.2953	0.2253
			475.000	0.5900		
			628.000	0.1120		
			1105.000	0.0650		
			1105.000	0.0530		
102 Tc m	43	4.350 m	416.300	0.0079	1.2315	0.9186
			418.400	0.0450		
			475.200	0.8300		
			497.200	0.0580		
			500.000	0.0500		
			628.100	0.2540		
			630.200	0.1530		
			691.800	0.0223		
			696.900	0.0600		
			920.200	0.0079		
			1046.400	0.1220		
			1074.700	0.0120		
			1103.300	0.1200		
			1113.100	0.0218		
			1127.500	0.0113		
			1179.200	0.0060		
			1197.600	0.0730		
			1292.500	0.0410		
			1318.000	0.0088		
			1338.600	0.0400		
			1488.100	0.0065		
			1511.100	0.0089		
			1596.200	0.0269		
			1615.300	0.1500		
			1711.200	0.0273		
			1810.700	0.0560		
			1907.300	0.0159		
			1945.800	0.0149		
			1967.000	0.0141		
			2139.200	0.0173		
			2225.700	0.0550		
			2244.700	0.1150		
			2340.000	0.0053		
			2438.400	0.0450		
			2536.000	0.0048		
102 Rh	45	207.000 d	70.000	0.0500	0.1886	0.1451
			418.520	0.0012		
			468.580	0.0280		
			475.060	0.4500		
			556.600	0.0200		
			628.050	0.0440		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
102 Rh	45	207.000 d	636.800	0.0022	0.1886	0.1451
			680.660	0.0056		
			739.580	0.0054		
			1046.590	0.0042		
			1103.160	0.0280		
			1105.700	0.0038		
			1158.100	0.0060		
			1362.100	0.0038		
			1562.200	0.0011		
102 Rh m	45	2.902 y	75.600	0.0021	1.1938	0.8885
			345.890	0.0086		
			415.250	0.0210		
			418.520	0.0931		
			420.400	0.0320		
			475.060	0.9400		
			628.050	0.0820		
			631.290	0.5550		
			692.400	0.0160		
			695.600	0.0280		
			697.490	0.4320		
			766.840	0.3380		
			1046.590	0.3380		
			1103.160	0.0450		
			1112.840	0.1880		
			1323.600	0.0045		
102 Ag m	47	7.700 m	556.700	0.4200	0.5597	0.4141
			977.700	0.0270		
			1461.100	0.0450		
			1534.800	0.0270		
			1588.800	0.0120		
			1692.300	0.0230		
			1834.700	0.0980		
			2017.800	0.0280		
			2054.500	0.0660		
			2159.400	0.0500		
			2566.900	0.0080		
			2682.100	0.0170		
			2716.500	0.0190		
			3238.600	0.0490		
102 Ag	47	12.900 m	556.700	0.9800	1.3479	0.9934
			603.600	0.0170		
			719.400	0.5800		
			835.400	0.1380		
			865.700	0.0370		
			891.500	0.0410		
			937.400	0.0110		
			964.400	0.0140		
			977.700	0.0210		
			1025.000	0.0430		
			1055.500	0.0090		
			1067.300	0.0100		
			1257.100	0.1280		
			1305.700	0.0230		
			1394.400	0.0110		
			1474.300	0.0270		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
102 Ag	47	12.900 m	1522.700	0.0270	1.3479	0.9934
			1534.800	0.0230		
			1555.800	0.0260		
			1581.600	0.1380		
			1744.600	0.1730		
			1800.700	0.0280		
			1890.100	0.0070		
			1924.900	0.0110		
			2110.700	0.0060		
			2242.900	0.0100		
			2310.200	0.0140		
			2493.900	0.0090		
			2613.000	0.0350		
			2690.900	0.0100		
			2726.900	0.0140		
			2805.000	0.0090		
			3398.000	0.0140		
			3406.500	0.0170		
102 Cd	48	5.500 m	58.900	0.0149	0.3673	0.2837
			97.400	0.0310		
			116.000	0.0610		
			120.400	0.0240		
			147.000	0.0056		
			213.300	0.0460		
			243.700	0.0031		
			360.300	0.0370		
			414.800	0.0750		
			481.000	0.6200		
			505.100	0.0930		
			531.000	0.0130		
			621.100	0.0130		
			675.700	0.0370		
			920.900	0.0060		
			1036.600	0.1260		
			1359.800	0.0490		
103 Ru	44	39.280 d	53.295	0.0038	0.2819	0.2162
			294.980	0.0025		
			443.800	0.0032		
			497.080	0.9010		
			557.040	0.0082		
			610.330	0.0559		
103 Ag	47	65.700 m	118.740	0.2220	0.3944	0.3085
			148.200	0.2010		
			243.960	0.0600		
			265.000	0.0060		
			266.860	0.0950		
			288.050	0.0050		
			298.430	0.0011		
			380.300	0.0011		
			385.400	0.0038		
			432.000	0.0012		
			484.100	0.0014		
			504.300	0.0018		
			511.000	0.7047		
			531.920	0.0622		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
103 Ag	47	65.700 m	575.330	0.0054	0.3944	0.3085
			580.160	0.0067		
			625.900	0.0012		
			698.770	0.0016		
			717.970	0.0024		
			742.110	0.0181		
			874.290	0.0020		
			884.600	0.0016		
			900.020	0.0016		
			938.900	0.0045		
			1007.080	0.0230		
			1029.970	0.0092		
			1064.080	0.0051		
			1072.700	0.0015		
			1142.200	0.0011		
			1155.270	0.0217		
			1182.770	0.0108		
			1267.900	0.0012		
			1272.000	0.0024		
			1273.830	0.0664		
			1280.700	0.0014		
			1325.520	0.0029		
			1386.070	0.0037		
			1486.000	0.0015		
			1547.100	0.0012		
			1775.700	0.0012		
104 Tc	43	18.200 m	135.300	0.0018	0.9697	0.7453
			150.800	0.0044		
			153.400	0.0027		
			160.400	0.0190		
			163.200	0.0036		
			170.000	0.0027		
			176.800	0.0062		
			179.100	0.0044		
			219.000	0.0036		
			245.500	0.0044		
			272.000	0.0018		
			277.100	0.0027		
			280.800	0.0018		
			285.500	0.0036		
			294.900	0.0060		
			349.600	0.0250		
			353.400	0.0036		
			357.990	0.8900		
			407.100	0.0027		
			421.800	0.0027		
			519.400	0.0080		
			530.530	0.1550		
			535.100	0.1370		
			542.700	0.0027		
			553.900	0.0044		
			581.200	0.0027		
			585.200	0.0036		
			605.200	0.0071		
			613.900	0.0120		
			622.000	0.0027		
			630.100	0.0130		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
104 Tc	43	18.200 m	660.200	0.0027	0.9697	0.7453
			667.500	0.0110		
			692.900	0.0044		
			711.000	0.0018		
			792.400	0.0200		
			796.800	0.0040		
			804.700	0.0036		
			838.500	0.0062		
			884.330	0.0990		
			888.200	0.0080		
			892.970	0.0890		
			977.300	0.0090		
			981.700	0.0100		
			986.400	0.0060		
			1017.700	0.0044		
			1020.600	0.0060		
			1085.200	0.0018		
			1093.000	0.0062		
			1157.400	0.0290		
			1172.200	0.0027		
			1187.000	0.0062		
			1199.100	0.0053		
			1201.300	0.0062		
			1209.400	0.0044		
			1247.800	0.0062		
			1251.000	0.0110		
			1267.600	0.0053		
			1270.400	0.0036		
			1282.000	0.0130		
			1338.200	0.0044		
			1343.900	0.0044		
			1346.700	0.0044		
			1380.600	0.0130		
			1396.500	0.0240		
			1472.200	0.0053		
			1515.700	0.0062		
			1518.400	0.0062		
			1541.200	0.0044		
			1596.800	0.0280		
			1601.000	0.0053		
			1612.400	0.0550		
			1636.000	0.0053		
			1654.200	0.0053		
			1676.900	0.0680		
			1709.400	0.0053		
			1722.900	0.0090		
			1729.800	0.0089		
			1736.900	0.0200		
			1760.800	0.0053		
			1769.600	0.0036		
			1840.300	0.0044		
			1905.600	0.0053		
			1911.600	0.0180		
			1927.800	0.0036		
			1931.300	0.0036		
			1971.300	0.0062		
			1997.900	0.0036		
			2015.700	0.0062		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
104 Tc	43	18.200 m	2043.500	0.0062	0.9697	0.7453
			2123.900	0.0140		
			2128.300	0.0018		
			2190.300	0.0110		
			2239.000	0.0036		
			2258.100	0.0053		
			2332.100	0.0100		
			2395.000	0.0053		
			2465.600	0.0080		
			2477.000	0.0027		
			2513.300	0.0044		
			2533.000	0.0100		
			2543.900	0.0053		
			2547.500	0.0036		
			2550.600	0.0080		
			2608.000	0.0140		
			2637.100	0.0062		
			2655.300	0.0044		
			2666.200	0.0036		
			2691.000	0.0027		
			2788.600	0.0071		
			3007.400	0.0044		
			3104.100	0.0036		
			3143.800	0.0044		
			3149.600	0.0110		
			3196.100	0.0027		
			3225.100	0.0027		
			3370.700	0.0027		
			3418.000	0.0036		
			3516.500	0.0018		
			3711.900	0.0018		
104 Rh	45	42.300 s	555.810	0.0199	0.0064	0.0048
104 Rh m	45	4.340 m	51.423	0.4820	0.0261	0.0212
			77.533	0.0207		
			97.114	0.0299		
			555.810	0.0200		
			767.780	0.0010		
104 Ag m	47	33.500 m	511.000	0.8629	0.6227	0.4674
			555.800	0.6100		
			767.600	0.0061		
			777.700	0.0043		
			785.700	0.0128		
			934.600	0.0030		
			996.100	0.0034		
			1191.500	0.0012		
			1238.800	0.0259		
			1265.200	0.0030		
			1341.800	0.0110		
			1636.000	0.0018		
			1689.500	0.0061		
			1720.800	0.0116		
			1781.800	0.0140		
			1794.600	0.0027		
			1977.500	0.0058		
			2065.900	0.0015		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
104 Ag	47	33.500 m	2139.200	0.0107	0.6227	0.4674
			2276.700	0.0165		
			2338.300	0.0061		
			2362.400	0.0030		
			2419.600	0.0049		
			2522.700	0.0058		
			2626.900	0.0061		
			2657.500	0.0021		
			2729.500	0.0079		
			2852.500	0.0021		
			2918.800	0.0012		
			3034.000	0.0015		
			3213.600	0.0098		
			3407.800	0.0098		
104 Ag	47	69.200 m	179.300	0.0093	1.4769	1.0893
			183.200	0.0046		
			204.000	0.0065		
			263.200	0.0100		
			289.700	0.0121		
			362.300	0.0130		
			444.500	0.0170		
			479.200	0.0102		
			497.000	0.0046		
			511.000	0.3616		
			555.800	0.9280		
			618.000	0.0056		
			623.200	0.0250		
			659.300	0.0046		
			740.500	0.0720		
			758.700	0.0640		
			767.600	0.6590		
			785.700	0.0960		
			805.900	0.0028		
			839.700	0.0140		
			857.900	0.1040		
			863.000	0.0690		
			872.000	0.0028		
			883.000	0.0028		
			892.600	0.0046		
			908.000	0.0450		
			923.300	0.0700		
			925.900	0.1250		
			941.600	0.2510		
			954.700	0.0074		
			1022.900	0.0056		
			1075.300	0.0210		
			1103.000	0.0028		
			1120.500	0.0084		
			1192.000	0.0028		
			1247.100	0.0056		
			1265.200	0.0430		
			1283.900	0.0074		
			1316.000	0.0028		
			1323.000	0.0037		
			1341.800	0.0730		
			1451.200	0.0111		
			1456.000	0.0028		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
104 Ag	47	69.200 m	1478.700	0.0028	1.4769	1.0893
			1526.600	0.0710		
			1544.700	0.0046		
			1551.600	0.0019		
			1600.200	0.0102		
			1625.800	0.0510		
			1636.000	0.0019		
			1687.000	0.0019		
			1709.500	0.0093		
			1723.000	0.0019		
			1763.100	0.0065		
			1781.800	0.0320		
			1792.000	0.0019		
			1813.700	0.0093		
			1889.900	0.0070		
			1986.000	0.0065		
			2014.000	0.0019		
			2157.000	0.0020		
			2267.400	0.0019		
104 Cd	48	57.700 m	66.600	0.0240	0.1301	0.1021
			83.500	0.4700		
			123.700	0.0035		
			150.200	0.0011		
			511.000	0.0150		
			559.000	0.0630		
			625.700	0.0220		
			709.300	0.1950		
105 Ru	44	4.440 h	85.900	0.0032	0.4404	0.3338
			149.200	0.0167		
			163.600	0.0014		
			183.600	0.0010		
			225.000	0.0015		
			262.900	0.0720		
			316.500	0.1170		
			326.100	0.0118		
			330.900	0.0079		
			350.000	0.0030		
			350.200	0.0110		
			393.400	0.0420		
			407.500	0.0018		
			413.500	0.0248		
			469.400	0.1750		
			470.000	0.0130		
			489.600	0.0059		
			499.200	0.0240		
			500.400	0.0030		
			513.700	0.0036		
			539.200	0.0013		
			575.000	0.0013		
			575.300	0.0107		
			632.300	0.0023		
			638.600	0.0028		
			652.600	0.0035		
			656.000	0.0020		
			656.100	0.0240		
			676.400	0.1670		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
105 Ru	44	4.440 h	724.500	0.4900	0.4404	0.3338
			822.100	0.0019		
			845.900	0.0073		
			875.800	0.0340		
			907.700	0.0059		
			969.400	0.0234		
			1017.200	0.0034		
			1321.100	0.0023		
105 Rh m	45	45.000 s	129.700	0.2050	0.0123	0.0130
105 Rh	45	1.473 d	280.100	0.0017	0.0436	0.0409
			306.100	0.0513		
			318.900	0.1920		
105 Ag m	47	7.230 m	319.160	0.0016	0.0003	0.0003
105 Ag	47	41.000 d	63.980	0.1050	0.2845	0.2400
			155.390	0.0036		
			182.850	0.0034		
			280.440	0.2940		
			289.180	0.0014		
			306.250	0.0082		
			311.640	0.0012		
			319.160	0.0430		
			325.260	0.0022		
			328.610	0.0034		
			331.510	0.0440		
			344.520	0.4090		
			360.660	0.0049		
			370.170	0.0079		
			392.640	0.0213		
			401.650	0.0025		
			414.660	0.0030		
			420.940	0.0013		
			437.120	0.0020		
			442.250	0.0049		
			443.370	0.1140		
			527.200	0.0015		
			560.720	0.0058		
			617.850	0.0115		
			644.550	0.1140		
			646.000	0.0017		
			650.720	0.0258		
			673.210	0.0109		
			681.900	0.0010		
			727.220	0.0012		
			743.310	0.0054		
			807.460	0.0127		
			962.430	0.0013		
			1087.940	0.0397		
106 Rh	45	29.900 s	511.800	0.2060	0.1120	0.0840
			616.200	0.0070		
			621.800	0.0980		
			873.100	0.0042		
			1050.100	0.0146		
			1128.000	0.0039		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
106 Rh	45	29.900 s	1562.000	0.0015	0.1120	0.0840
106 Rh m	45	2.200 h	195.100	0.0060	1.5871	1.1830
			221.800	0.0648		
			228.600	0.0207		
			319.600	0.0086		
			328.300	0.0121		
			390.800	0.0350		
			406.000	0.1180		
			419.200	0.0060		
			429.400	0.1339		
			450.800	0.2450		
			473.200	0.0090		
			511.700	0.8600		
			586.000	0.0086		
			601.200	0.0302		
			616.100	0.2039		
			645.800	0.0276		
			680.600	0.0190		
			703.100	0.0450		
			717.200	0.2920		
			748.500	0.1953		
			793.800	0.0570		
			804.600	0.1313		
			808.400	0.0752		
			825.000	0.1370		
			848.000	0.0360		
			1020.500	0.0199		
			1046.700	0.3070		
			1127.700	0.1360		
			1200.500	0.1150		
			1224.200	0.0820		
			1395.500	0.0290		
			1529.400	0.1770		
			1565.400	0.0060		
			1573.900	0.0670		
			1724.600	0.0220		
			1840.600	0.0190		
			2020.000	0.0173		
			2260.000	0.0086		
106 Ag	47	23.960 m	511.600	0.1690	0.0541	0.0411
			616.600	0.0026		
			622.800	0.0026		
			873.400	0.0017		
			1049.800	0.0016		
			1127.800	0.0010		
106 Ag m	47	8.410 d	195.050	0.0031	1.5354	1.1456
			221.701	0.0660		
			228.633	0.0212		
			328.463	0.0115		
			374.460	0.0026		
			391.030	0.0370		
			406.182	0.1350		
			418.550	0.0034		
			429.646	0.1320		
			450.976	0.2840		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
106 Ag m	47	8.410 d	474.060	0.0093	1.5354	1.1456
			511.850	0.8800		
			585.970	0.0044		
			601.170	0.0162		
			616.170	0.2170		
			646.030	0.0146		
			680.190	0.0220		
			703.110	0.0450		
			717.340	0.2910		
			748.360	0.2070		
			793.170	0.0590		
			804.280	0.1240		
			808.360	0.0410		
			824.690	0.1540		
			847.600	0.0247		
			848.200	0.0194		
			874.810	0.0034		
			949.500	0.0019		
			956.218	0.0048		
			1019.720	0.0105		
			1045.830	0.2970		
			1050.600	0.0026		
			1053.770	0.0097		
			1121.590	0.0057		
			1128.020	0.1180		
			1136.850	0.0023		
			1178.070	0.0011		
			1199.390	0.1130		
			1222.880	0.0710		
			1349.500	0.0012		
			1394.350	0.0150		
			1527.650	0.1640		
			1565.400	0.0049		
			1572.350	0.0660		
			1722.760	0.0141		
			1839.050	0.0200		
107 Ru	44	4.200 m	194.500	0.1430	0.1304	0.1001
			375.000	0.0600		
			860.000	0.0700		
			931.200	0.0400		
			1030.000	0.0400		
			1290.000	0.0400		
107 Rh	45	21.700 m	115.700	0.0058	0.1941	0.1774
			219.400	0.0011		
			232.400	0.0023		
			266.100	0.0031		
			277.600	0.0190		
			288.300	0.0080		
			302.800	0.7300		
			312.200	0.0533		
			321.800	0.0248		
			348.200	0.0248		
			357.800	0.0045		
			367.300	0.0212		
			381.900	0.0072		
			392.500	0.0970		

Nuclide	Z	Half Life	Energy keV	Yield	I R*m2/h/Ci	T Rem/h/Ci
107 Rh	45	21.700 m	431.700	0.0029	0.1941	0.1774
			451.900	0.0056		
			471.200	0.0013		
			567.700	0.0124		
			670.100	0.0248		
			753.800	0.0015		
			789.900	0.0010		
107 Cd	48	6.490 h	93.100	0.0460	0.0027	0.0027
			828.900	0.0018		
107 In	49	32.700 m	205.000	0.4800	0.5723	0.4381
			300.400	0.0017		
			303.700	0.0062		
			311.400	0.0014		
			320.900	0.0960		
			365.600	0.0355		
			414.000	0.0100		
			416.300	0.0144		
			456.200	0.0067		
			459.500	0.0014		
			505.400	0.1272		
			519.300	0.0020		
			549.700	0.0020		
			554.600	0.0086		
			585.300	0.0014		
			597.600	0.0048		
			600.700	0.0043		
			603.900	0.0140		
			611.200	0.0065		
			617.700	0.0024		
			629.300	0.0024		
			638.000	0.0017		
			640.700	0.0053		
			646.300	0.0020		
			649.600	0.0024		
			669.800	0.0020		
			676.700	0.0024		
			700.000	0.0020		
			702.800	0.0034		
			715.000	0.0048		
			716.500	0.0038		
			725.200	0.0053		
			728.000	0.0278		
			762.600	0.0067		
			793.000	0.0014		
			807.500	0.0053		
			809.000	0.0240		
			869.000	0.0072		
			903.000	0.0067		
			915.000	0.0115		
			921.500	0.0149		
			938.000	0.0034		
			947.000	0.0067		
			954.000	0.0043		
			984.700	0.0038		
			995.600	0.0024		
			998.700	0.0100		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
107 In	49	32.700 m	1038.600	0.0024	0.5723	0.4381
			1050.500	0.0024		
			1057.200	0.0100		
			1063.300	0.0130		
			1085.000	0.0043		
			1092.500	0.0024		
			1115.500	0.0029		
			1142.000	0.0038		
			1145.600	0.0077		
			1197.000	0.0043		
			1209.800	0.0029		
			1236.300	0.0043		
			1268.400	0.0432		
			1301.000	0.0029		
			1324.500	0.0067		
			1343.500	0.0140		
			1365.000	0.0029		
			1377.700	0.0125		
			1404.000	0.0024		
			1411.000	0.0096		
			1455.400	0.0082		
			1501.000	0.0096		
			1508.000	0.0014		
			1546.000	0.0034		
			1556.500	0.0077		
			1571.500	0.0120		
			1589.300	0.0034		
			1603.000	0.0086		
			1609.000	0.0024		
			1716.800	0.0048		
			1733.500	0.0024		
			1744.300	0.0048		
			1767.000	0.0038		
			1777.000	0.0144		
			1798.000	0.0038		
			1819.000	0.0014		
			1830.000	0.0062		
			1853.000	0.0029		
			1860.000	0.0038		
			1877.000	0.0072		
			1922.000	0.0154		
			1957.000	0.0053		
			1964.000	0.0048		
			1980.000	0.0072		
			1984.500	0.0120		
			2006.700	0.0173		
			2047.000	0.0029		
			2064.500	0.0144		
			2100.300	0.0072		
			2184.000	0.0086		
			2202.500	0.0029		
			2252.000	0.0014		
			2264.000	0.0024		
			2286.000	0.0100		
			2305.000	0.0110		
			2332.000	0.0038		
			2406.500	0.0024		
			2462.000	0.0014		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
107 In	49	32.700 m	2471.000	0.0014	0.5723	0.4381
			2498.000	0.0014		
			2509.000	0.0014		
			2586.500	0.0024		
			2654.000	0.0029		
			2666.000	0.0072		
			2682.000	0.0024		
			2701.500	0.0014		
			2718.000	0.0043		
			2784.500	0.0020		
			2863.000	0.0020		
			2875.000	0.0067		
			2986.000	0.0020		
108 Ru	44	4.500 m	164.950	0.2800	0.0229	0.0228
108 Rh	45	16.800 s	433.700	0.4300	0.2908	0.2235
			497.500	0.0688		
			510.600	0.1032		
			618.700	0.1900		
			1520.000	0.0516		
			2000.000	0.0300		
108 Rh m	45	5.900 m	404.600	0.2751	1.2663	0.9542
			434.200	0.9100		
			497.300	0.2300		
			581.100	0.5858		
			614.600	0.2779		
			723.000	0.0729		
			901.400	0.3052		
			931.300	0.0900		
			947.100	0.4974		
			1092.700	0.0300		
			1234.300	0.0800		
			1528.000	0.0091		
			1815.600	0.0600		
108 Ag	47	2.370 m	433.927	0.0050	0.0085	0.0064
			618.860	0.0026		
			632.980	0.0175		
108 Ag m	47	127.087 y	79.200	0.0680	0.9227	0.6933
			433.927	0.9030		
			614.370	0.9080		
			722.950	0.9090		
109 Rh	45	1.333 m	35.340	0.0134	0.1776	0.1618
			81.780	0.0073		
			113.350	0.0590		
			149.820	0.0062		
			152.910	0.0067		
			178.030	0.0790		
			200.130	0.0050		
			211.880	0.0067		
			213.810	0.0056		
			215.280	0.0180		
			245.030	0.0134		
			249.160	0.0600		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
109 Rh	45	1.333 m	264.330	0.0039	0.1776	0.1618
			266.260	0.0028		
			274.210	0.0011		
			276.260	0.0220		
			291.360	0.0780		
			295.540	0.0034		
			325.430	0.0150		
			326.830	0.5600		
			378.050	0.0129		
			426.140	0.0800		
			491.700	0.0039		
			540.700	0.0050		
			597.300	0.0011		
			617.900	0.0011		
			692.000	0.0011		
			1041.700	0.0011		
			1318.000	0.0011		
109 Pd m	46	4.690 m	188.900	0.5590	0.0544	0.0521
109 Pd	46	13.427 h	88.040	0.0360	0.0014	0.0015
109 Cd	48	1.060E-05 s	203.500	1.0000	0.2351	0.2153
			259.500	0.9000		
109 Cd	48	1.200E-05 s	59.900	0.0950	0.0032	0.0030
109 Cd	48	1.271 y	88.032	0.0361	0.0014	0.0015
109 In	49	0.210 s	405.000	0.2100	1.1188	0.8261
			680.000	1.0000		
			1030.000	0.1900		
			1435.000	0.8000		
109 In m	49	1.340 m	650.100	0.9370	0.3494	0.2558
109 In	49	4.200 h	59.900	0.0018	0.3033	0.2420
			74.800	0.0221		
			84.000	0.0294		
			203.500	0.7350		
			288.400	0.0176		
			324.400	0.0037		
			326.300	0.0054		
			347.500	0.0220		
			420.500	0.0099		
			426.200	0.0423		
			461.400	0.0010		
			482.200	0.0013		
			529.300	0.0059		
			583.800	0.0029		
			613.600	0.0250		
			619.000	0.0176		
			619.800	0.0019		
			623.500	0.0600		
			649.800	0.0301		
			652.900	0.0191		
			678.800	0.0099		
			721.500	0.0090		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
109 In	49	4.200 h	727.400	0.0026	0.3033	0.2420
			730.900	0.0039		
			753.900	0.0044		
			793.900	0.0059		
			800.000	0.0040		
			822.500	0.0140		
			832.200	0.0026		
			852.300	0.0026		
			862.200	0.0017		
			890.500	0.0028		
			900.700	0.0047		
			925.800	0.0088		
			930.300	0.0029		
			949.100	0.0154		
			998.500	0.0071		
			1004.100	0.0022		
			1049.700	0.0116		
			1106.200	0.0032		
			1149.100	0.0430		
			1196.500	0.0176		
			1272.900	0.0059		
			1346.900	0.0059		
			1352.300	0.0073		
			1419.200	0.0132		
			1475.800	0.0044		
			1539.300	0.0014		
			1569.000	0.0013		
			1622.300	0.0206		
			1771.900	0.0044		
110 Rh	45	3.000 s	375.000	0.5100	0.1092	0.0947
110 Rh m	45	28.500 s	373.800	0.9100	1.4162	1.0744
			398.500	0.1490		
			440.000	0.2600		
			478.800	0.0400		
			531.200	0.0180		
			546.300	0.3600		
			584.900	0.1740		
			653.400	0.1700		
			687.700	0.2800		
			813.700	0.0910		
			838.100	0.2200		
			890.500	0.1280		
			904.500	0.2700		
			979.600	0.0460		
			1048.300	0.0790		
			1086.500	0.0310		
			1216.500	0.0740		
			1230.900	0.1270		
			1392.100	0.0450		
			1406.600	0.0660		
			1525.800	0.0180		
			1579.200	0.0160		
			1593.600	0.0630		
			1871.700	0.0140		
			1885.100	0.0400		
110 Ag	47	24.600 s	657.749	0.0450	0.0170	0.0124

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
110 Ag m	47	249.900 d	365.441	0.0011	1.5078	1.1023
			446.797	0.0366		
			620.346	0.0278		
			626.246	0.0024		
			657.749	0.9470		
			676.600	0.0014		
			677.606	0.1072		
			686.988	0.0649		
			706.670	0.1674		
			708.115	0.0028		
			744.260	0.0466		
			763.928	0.2236		
			818.016	0.0732		
			884.667	0.7290		
			937.478	0.3430		
			997.233	0.0013		
			1334.304	0.0013		
			1384.270	0.2435		
			1475.759	0.0399		
			1505.031	0.1311		
			1562.266	0.0118		
110 In	49	69.100 m	657.750	0.9800	0.4826	0.3535
			815.350	0.0028		
			818.016	0.0079		
			884.667	0.0011		
			1125.750	0.0102		
			1235.600	0.0026		
			1421.100	0.0042		
			1475.760	0.0047		
			1602.580	0.0013		
			1698.100	0.0027		
			1783.490	0.0028		
			1975.410	0.0015		
			2002.540	0.0013		
			2129.480	0.0213		
			2211.490	0.0176		
			2317.540	0.0131		
			2420.800	0.0054		
			2444.200	0.0030		
			2535.800	0.0024		
			2808.300	0.0055		
			2975.210	0.0014		
			3043.690	0.0013		
			3078.260	0.0030		
			3475.240	0.0065		
			3596.850	0.0013		
110 In m	49	4.900 h	121.170	0.0039	1.6951	1.2383
			409.600	0.0046		
			461.100	0.0223		
			461.800	0.0470		
			467.000	0.0014		
			560.320	0.0184		
			581.930	0.0840		
			584.210	0.0640		
			626.240	0.0145		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
110 In m	49	4.900 h	641.680	0.2560	1.6951	1.2383
			648.580	0.0039		
			657.750	0.9700		
			677.600	0.0450		
			706.670	0.0013		
			707.400	0.2910		
			708.120	0.0165		
			744.260	0.0194		
			759.870	0.0310		
			764.000	0.0017		
			795.420	0.0032		
			818.016	0.0223		
			844.667	0.0320		
			871.080	0.0031		
			884.667	0.9200		
			901.530	0.0194		
			937.478	0.6750		
			997.160	0.1040		
			1018.870	0.0029		
			1019.480	0.0068		
			1045.240	0.0080		
			1085.520	0.0135		
			1117.360	0.0417		
			1125.670	0.0019		
			1163.280	0.0029		
			1305.110	0.0034		
			1334.140	0.0097		
			1384.390	0.0018		
			1421.040	0.0046		
			1475.760	0.0123		
			1505.000	0.0025		
			1521.660	0.0016		
			1562.260	0.0049		
			1579.070	0.0025		
			1592.690	0.0012		
			1697.770	0.0025		
			1783.500	0.0015		
			1802.390	0.0061		
			1903.360	0.0029		
			1982.770	0.0038		
110 Sn	50	4.000 h	283.000	1.0000	0.1575	0.1493
111 Pd	46	5.500 h	172.000	0.3250	0.0280	0.0276
111 Ag	47	7.450 d	96.750	0.0012	0.0147	0.0133
			245.400	0.0123		
			342.130	0.0670		
111 In	49	2.830 d	171.280	0.9093	0.2039	0.1895
			245.390	0.9417		
111 Sn	50	35.300 m	372.000	0.0046	0.0810	0.0598
			457.400	0.0035		
			536.300	0.0032		
			564.300	0.0028		
			761.300	0.0140		
			953.800	0.0049		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
111 Sn	50	35.300 m	1026.000	0.0026	0.0810	0.0598
			1101.000	0.0070		
			1152.500	0.0282		
			1541.900	0.0082		
			1609.500	0.0133		
			1914.000	0.0200		
			2107.000	0.0035		
			2178.600	0.0030		
			2212.000	0.0020		
			2324.000	0.0034		
112 Ag	47	3.120 h	119.900	0.0020	0.3337	0.2457
			606.000	0.0352		
			616.800	0.4289		
			692.000	0.0086		
			694.200	0.0300		
			718.000	0.0018		
			797.400	0.0060		
			814.900	0.0012		
			851.000	0.0100		
			861.000	0.0027		
			918.000	0.0010		
			946.800	0.0010		
			1006.300	0.0010		
			1102.700	0.0040		
			1125.000	0.0018		
			1252.900	0.0032		
			1311.600	0.0112		
			1355.900	0.0052		
			1387.000	0.0532		
			1450.500	0.0012		
			1468.200	0.0050		
			1538.000	0.0047		
			1613.200	0.0300		
			1798.200	0.0086		
			1944.600	0.0012		
			2051.000	0.0015		
			2056.700	0.0056		
			2106.000	0.0214		
			2211.700	0.0040		
			2506.600	0.0099		
			2685.600	0.0025		
			2828.900	0.0040		
112 In	49	14.400 m	606.400	0.0124	0.0251	0.0185
			618.200	0.0530		
			1252.600	0.0030		
113 In	49	1.658 h	391.688	0.6490	0.1455	0.1235
113 Sn	50	115.100 d	255.115	0.0185	0.0026	0.0023
114 Ag	47	4.520 s	558.000	0.1500	0.0722	0.0537
			576.100	0.0120		
			651.300	0.0049		
			747.000	0.0010		
			808.200	0.0045		
			1208.000	0.0022		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
114 Ag	47	4.520 s	1286.000	0.0010	0.0722	0.0537
			1302.900	0.0082		
			1364.000	0.0027		
			1660.600	0.0045		
			2454.800	0.0025		
114 In	49	1.198 m	1299.830	0.0020	0.0013	0.0010
114 In m	49	49.510 d	190.270	0.1541	0.0470	0.0380
			558.430	0.0440		
			725.240	0.0430		
114 Sb	51	3.430 m	322.000	0.0550	0.7912	0.5833
			392.000	0.0110		
			716.600	0.0490		
			887.700	0.1830		
			1299.800	1.0000		
115 Ag	47	20.000 m	131.400	0.0446	0.3375	0.2622
			213.500	0.0769		
			229.700	0.3250		
			237.100	0.0068		
			243.500	0.0056		
			277.400	0.0012		
			303.300	0.0105		
			326.500	0.0325		
			360.900	0.0102		
			372.600	0.0316		
			389.300	0.0059		
			417.300	0.0053		
			473.200	0.0580		
			507.700	0.0220		
			539.600	0.0022		
			548.300	0.0034		
			585.000	0.0025		
			649.900	0.0430		
			699.200	0.0313		
			719.000	0.0012		
			750.000	0.0015		
			777.900	0.0096		
			820.900	0.0012		
			830.600	0.0019		
			852.400	0.0015		
			862.800	0.0015		
			932.800	0.0019		
			963.800	0.0074		
			1091.900	0.0062		
			1127.700	0.0031		
			1135.100	0.0081		
			1151.600	0.0031		
			1183.300	0.0043		
			1223.000	0.0022		
			1364.000	0.0037		
			1379.900	0.0090		
			1395.000	0.0028		
			1407.100	0.0031		
			1435.600	0.0025		
			1463.900	0.0084		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
115 Ag	47	20.000 m	1507.400	0.0208	0.3375	0.2622
			1608.600	0.0031		
			1648.900	0.0062		
			1653.000	0.0031		
			1665.100	0.0037		
			1713.800	0.0025		
			1795.400	0.0046		
			1842.000	0.0270		
			1884.900	0.0065		
			1911.700	0.0034		
			1927.600	0.0217		
			2081.300	0.0015		
			2114.200	0.0189		
			2156.800	0.0496		
			2387.800	0.0031		
			2487.800	0.0015		
			2495.400	0.0025		
			2908.100	0.0015		
115 Cd	48	2.227 d	35.630	0.0046	0.1335	0.1019
			231.470	0.0082		
			260.800	0.0220		
			492.140	0.1020		
			527.700	0.3290		
115 Cd m	48	44.600 d	484.350	0.0020	0.0114	0.0084
			933.600	0.0133		
			1290.500	0.0060		
115 In	49	4.300 h	336.241	0.4670	0.0890	0.0815
115 Sb	51	31.800 m	114.500	0.0019	0.3159	0.2420
			491.000	0.0370		
			499.000	0.9930		
			748.000	0.0019		
			986.000	0.0038		
			1008.000	0.0036		
			1121.000	0.0013		
			1136.000	0.0016		
			1236.000	0.0068		
			1279.000	0.0029		
			1621.000	0.0039		
			1690.000	0.0010		
			1729.000	0.0019		
			2224.000	0.0013		
115 Te	52	6.900E-06 s	281.000	0.8425	0.1316	0.1246
115 Te	52	6.000 m	374.000	0.0300	0.7063	0.5192
			427.000	0.0100		
			602.000	0.0400		
			633.000	0.0100		
			656.000	0.0600		
			722.700	0.3000		
			771.000	0.0700		
			1098.000	0.1800		
			1277.000	0.0200		
			1289.000	0.0600		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
115 Te	52	6.000 m	1326.000	0.1900	0.7063	0.5192
			1354.000	0.0200		
			1380.000	0.2100		
			1600.000	0.0300		
			1619.000	0.0070		
			2207.000	0.0100		
			2634.000	0.0050		
			2689.000	0.0100		
116 Ag m	47	10.400 s	513.930	0.7200	0.7451	0.5503
			666.780	0.0560		
			699.850	0.0580		
			706.260	0.4610		
			709.780	0.1440		
			807.500	0.1220		
			867.320	0.0108		
			1029.850	0.2480		
			1213.510	0.0480		
			1408.750	0.0190		
116 Ag	47	2.680 m	513.930	0.7000	0.4857	0.3623
			699.850	0.1100		
			706.260	0.0160		
			708.580	0.0100		
			769.410	0.0160		
			867.320	0.0130		
			1213.510	0.0650		
			1305.380	0.0550		
			1408.750	0.0380		
			2478.790	0.1000		
116 In	49	14.100 s	450.000	0.0012	0.0090	0.0067
			950.000	0.0010		
			1270.000	0.0125		
116 In m	49	54.150 m	138.326	0.0329	1.2673	0.9384
			262.950	0.0012		
			278.490	0.0014		
			303.800	0.0012		
			355.360	0.0083		
			416.860	0.2920		
			463.140	0.0083		
			655.700	0.0011		
			689.000	0.0016		
			705.700	0.0017		
			781.100	0.0011		
			818.700	0.1150		
			972.550	0.0045		
			1097.300	0.5620		
			1293.540	0.8440		
			1507.400	0.1000		
			1753.800	0.0246		
			2112.100	0.1550		
116 Sb	51	15.800 m	931.800	0.2470	0.8414	0.6183
			1293.540	0.8480		
			2225.330	0.1420		
			2843.500	0.0075		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
116 Sb	51	15.800 m	2970.000	0.0017	0.8414	0.6183
116 Sb m	51	60.300 m	99.818	0.8300	1.5980	1.2047
			135.520	0.3600		
			407.350	0.4200		
			436.680	0.0400		
			542.872	0.5200		
			844.000	0.1200		
			972.550	0.7200		
			1072.360	0.2800		
			1293.540	1.0000		
116 Te	52	2.490 h	94.000	0.2900	0.0210	0.0205
			103.000	0.0400		
			628.700	0.0200		
116 I	53	2.900 s	540.200	0.0115	0.0424	0.0310
			679.000	0.1000		
117 Ag	47	5.340 s	104.700	0.0018	0.4105	0.3442
			135.400	0.4600		
			142.100	0.0450		
			157.100	0.0590		
			184.500	0.0590		
			202.200	0.0060		
			204.600	0.0540		
			215.300	0.0064		
			219.700	0.0310		
			249.500	0.0100		
			298.100	0.2000		
			307.200	0.0210		
			322.100	0.0670		
			337.700	0.0880		
			341.100	0.0190		
			353.100	0.0046		
			362.300	0.0160		
			365.400	0.0150		
			377.600	0.0110		
			386.800	0.3800		
			413.800	0.0260		
			421.200	0.0210		
			442.600	0.0120		
			482.400	0.0190		
			486.800	0.0090		
			492.700	0.0090		
			500.600	0.0100		
			522.100	0.0890		
			526.400	0.0120		
			529.900	0.0070		
			543.200	0.0028		
			546.500	0.0032		
			555.200	0.0046		
			557.800	0.0200		
			569.900	0.0060		
			581.900	0.0092		
			585.400	0.0028		
			591.900	0.0028		
			608.800	0.0051		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
117 Ag	47	5.340 s	637.300	0.0140	0.4105	0.3442
			665.100	0.0060		
			684.600	0.0750		
			691.700	0.0023		
			743.100	0.0032		
			754.800	0.0110		
			772.100	0.0018		
			786.300	0.0170		
			801.200	0.0051		
			819.900	0.0170		
			834.200	0.0046		
			895.800	0.0032		
			899.500	0.0014		
			913.400	0.0046		
			1038.000	0.0092		
			1130.600	0.0160		
			1141.900	0.0055		
			1220.400	0.0101		
			1258.600	0.0150		
			1330.300	0.0090		
			1455.800	0.0032		
			1508.600	0.0028		
117 Cd	48	2.490 h	71.120	0.0039	0.5553	0.4258
			89.730	0.0326		
			160.800	0.0025		
			220.920	0.0117		
			273.349	0.2790		
			279.800	0.0011		
			292.050	0.0064		
			344.459	0.1790		
			387.960	0.0031		
			397.200	0.0020		
			419.790	0.0018		
			434.190	0.0980		
			439.390	0.0011		
			463.040	0.0075		
			497.770	0.0011		
			527.000	0.0014		
			627.010	0.0011		
			660.830	0.0011		
			699.580	0.0024		
			712.710	0.0056		
			716.430	0.0020		
			728.640	0.0024		
			748.050	0.0056		
			831.800	0.0226		
			840.210	0.0081		
			850.720	0.0012		
			861.300	0.0028		
			862.600	0.0061		
			880.710	0.0396		
			945.670	0.0153		
			949.630	0.0022		
			952.330	0.0014		
			963.110	0.0061		
			969.300	0.0045		
			1035.610	0.0024		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
117 Cd	48	2.490 h	1051.700	0.0379	0.5553	0.4258
			1052.700	0.0073		
			1116.600	0.0103		
			1120.050	0.0024		
			1125.100	0.0045		
			1142.430	0.0167		
			1143.500	0.0014		
			1183.400	0.0013		
			1229.110	0.0061		
			1232.300	0.0028		
			1247.890	0.0120		
			1260.000	0.0114		
			1272.730	0.0073		
			1291.000	0.0067		
			1294.300	0.0045		
			1303.270	0.1840		
			1314.710	0.0059		
			1337.570	0.0162		
			1362.400	0.0024		
			1404.400	0.0012		
			1408.720	0.0128		
			1422.270	0.0033		
			1430.970	0.0056		
			1433.500	0.0011		
			1450.150	0.0061		
			1475.460	0.0042		
			1562.240	0.0142		
			1576.620	0.1120		
			1578.400	0.0014		
			1652.100	0.0028		
			1682.070	0.0070		
			1706.930	0.0100		
			1723.060	0.0201		
			1739.130	0.0013		
			1856.400	0.0025		
			1867.300	0.0011		
			2012.490	0.0011		
117 Cd m	48	3.360 h	97.700	0.0105	1.0059	0.7423
			99.400	0.0010		
			168.630	0.0029		
			220.920	0.0024		
			292.050	0.0010		
			299.450	0.0045		
			310.260	0.0050		
			325.300	0.0013		
			366.910	0.0333		
			439.390	0.0018		
			460.940	0.0162		
			484.790	0.0102		
			545.000	0.0016		
			564.397	0.1470		
			597.340	0.0013		
			617.500	0.0034		
			627.260	0.0024		
			631.800	0.0280		
			663.500	0.0068		
			712.710	0.0100		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
117 Cd m	48	3.360 h	730.800	0.0010	1.0059	0.7423
			748.060	0.0450		
			762.720	0.0173		
			788.160	0.0050		
			827.600	0.0026		
			860.410	0.0790		
			880.710	0.0070		
			886.000	0.0039		
			929.300	0.0079		
			931.370	0.0364		
			957.200	0.0039		
			1029.060	0.1170		
			1065.980	0.2310		
			1170.710	0.0065		
			1196.200	0.0039		
			1205.500	0.0013		
			1209.000	0.0013		
			1209.000	0.0018		
			1234.590	0.1100		
			1256.900	0.0018		
			1339.300	0.0207		
			1365.540	0.0165		
			1432.910	0.1340		
			1652.240	0.0047		
			1669.500	0.0063		
			1957.500	0.0016		
			1997.330	0.2620		
			2096.400	0.0744		
			2322.750	0.0786		
			2400.450	0.0076		
			2417.400	0.0102		
			2462.500	0.0021		
			2476.200	0.0019		
			2540.730	0.0015		
117 In	49	43.800 m	158.600	0.8700	0.3867	0.3072
			396.600	0.0014		
			552.900	1.0000		
117 In m	49	1.942 h	158.600	0.1590	0.0463	0.0443
			315.302	0.1910		
117 Sn	50	13.610 d	156.020	0.0211	0.0687	0.0694
			158.560	0.8640		
117 Sb	51	2.800 h	158.562	0.8590	0.0705	0.0702
			861.350	0.0031		
			1004.510	0.0021		
			1020.600	0.0010		
			1021.000	0.0011		
117 Te	52	0.103 s	100.000	1.0000	0.1883	0.1838
			274.400	0.9500		
117 Te	52	62.000 m	568.800	0.0065	0.6464	0.4737
			634.500	0.0045		
			719.700	0.6470		
			831.000	0.0052		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
117 Te	52	62.000 m	886.700	0.0149	0.6464	0.4737
			923.900	0.0620		
			930.200	0.0019		
			996.700	0.0390		
			1090.700	0.0690		
			1354.500	0.0052		
			1360.500	0.0045		
			1454.500	0.0084		
			1565.100	0.0097		
			1580.500	0.0019		
			1595.300	0.0019		
			1716.400	0.1590		
			2213.000	0.0032		
			2284.800	0.0039		
			2300.000	0.0120		
			2379.300	0.0013		
117 I	53	2.300 m	111.400	0.0039	0.1978	0.1803
			274.400	0.2079		
			294.700	0.0100		
			303.200	0.0154		
			325.900	0.7700		
			407.000	0.0070		
			497.200	0.0116		
			683.000	0.0200		
			837.300	0.0154		
117 Xe	54	1.017 m	73.700	0.0402	0.3422	0.2798
			94.900	0.0332		
			112.000	0.0138		
			117.000	0.1107		
			155.360	0.0297		
			160.740	0.0913		
			203.300	0.0121		
			221.400	0.2700		
			257.000	0.0448		
			294.750	0.2010		
			303.400	0.0613		
			315.770	0.0691		
			353.200	0.0529		
			439.150	0.0537		
			519.000	0.1500		
			609.700	0.0121		
			639.000	0.1360		
			661.340	0.1500		
			1523.240	0.0640		
118 Ag m	47	2.800 s	127.700	0.0722	1.2171	0.8994
			487.750	0.5883		
			677.000	0.5783		
			770.900	0.2000		
			808.280	0.0600		
			1058.600	0.3200		
			1939.000	0.0500		
			2101.500	0.0990		
			2779.200	0.0800		
			2789.400	0.1140		
			3225.900	0.1320		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
118 Ag	47	3.700 s	487.750	0.8100	0.4598	0.3455
			677.000	0.3400		
			770.900	0.0060		
			781.500	0.0580		
			797.800	0.0700		
			808.280	0.0020		
			1058.600	0.0200		
			1270.000	0.0430		
118 In	49	5.000 s	528.000	0.0540	0.1684	0.1243
			827.000	0.0120		
			1229.500	0.1500		
			1680.000	0.0300		
			1880.000	0.0300		
118 In m2	49	8.500 s	138.200	0.2157	0.0140	0.0146
118 In m1	49	4.450 m	208.600	0.0230	1.4603	1.0717
			230.000	0.0090		
			445.800	0.0590		
			474.400	0.0300		
			560.200	0.0140		
			637.300	0.0350		
			683.300	0.5500		
			813.700	0.0330		
			1050.800	0.8200		
			1097.000	0.0340		
			1173.200	0.0130		
			1229.500	0.9600		
			1259.000	0.0390		
			1504.200	0.0090		
			1550.000	0.0100		
			1734.600	0.0050		
			2042.300	0.0340		
			2325.000	0.0020		
118 Sb	51	3.600 m	528.200	0.0039	0.0224	0.0165
			826.900	0.0036		
			1229.640	0.0247		
			1267.000	0.0057		
118 Sb m	51	5.000 h	41.000	0.1800	1.3584	1.0147
			253.678	0.9900		
			1050.690	0.9700		
			1091.500	0.0360		
			1229.640	1.0000		
118 I	53	13.700 m	496.400	0.0020	0.5308	0.3917
			544.800	0.1230		
			551.800	0.0200		
			559.500	0.0020		
			605.200	0.9500		
			684.900	0.0040		
			711.200	0.0040		
			740.700	0.0160		
			1149.900	0.0500		
			1257.000	0.0380		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
118 I	53	13.700 m	1285.900	0.0060	0.5308	0.3917
			1338.400	0.1240		
120 Ag	47	0.320 s	203.000	0.2300	0.0245	0.0230
120 Cd	48	50.800 s	251.500	0.0019	0.0328	0.0243
			1207.500	0.0059		
			2039.800	0.0186		
			2390.200	0.0114		
120 In	49	3.080 s	251.500	0.0019	0.1678	0.1233
			704.200	0.0142		
			990.000	0.0013		
			1172.500	0.1900		
			1185.800	0.0091		
			1207.500	0.0059		
			1250.800	0.0023		
			2039.800	0.0186		
			2098.300	0.0042		
			2390.200	0.0114		
120 In m	49	44.400 s	89.900	0.0630	1.5598	1.1472
			177.500	0.0029		
			197.300	0.0790		
			268.100	0.0150		
			354.700	0.0140		
			401.200	0.0080		
			414.700	0.0270		
			449.100	0.0058		
			465.500	0.0078		
			545.600	0.0160		
			592.200	0.0150		
			610.000	0.0150		
			637.200	0.0160		
			697.000	0.0170		
			702.800	0.0240		
			713.500	0.0690		
			863.800	0.3010		
			925.000	0.0150		
			965.000	0.0790		
			985.100	0.0230		
			1023.200	0.6020		
			1162.500	0.0190		
			1171.600	0.9710		
			1184.400	0.0260		
			1246.500	0.0050		
			1250.800	0.0130		
			1294.700	0.1080		
			1472.200	0.0440		
			1582.000	0.0029		
			1886.600	0.0390		
			2007.300	0.0630		
			2096.600	0.0120		
			2178.300	0.0240		
			2266.700	0.0140		
			2354.500	0.0090		
			2420.000	0.0090		
			2605.000	0.0190		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
120 Sb	51	15.890 m	703.800	0.0015	0.0110	0.0081
			1171.200	0.0169		
120 Sb m	51	5.760 d	89.800	0.8000	1.2976	0.9806
			197.300	0.8800		
			1023.300	0.9900		
			1113.400	0.0130		
			1171.700	1.0000		
120 I m	53	53.000 m	425.700	0.0280	2.3096	1.7031
			433.000	0.0210		
			477.900	0.0120		
			485.100	0.0120		
			560.400	1.0000		
			601.100	0.8700		
			614.700	0.6700		
			651.900	0.0070		
			654.500	0.0210		
			694.400	0.0056		
			703.900	0.0190		
			728.500	0.1000		
			763.200	0.0350		
			874.700	0.0100		
			881.800	0.0230		
			921.300	0.0430		
			976.000	0.3500		
			1031.500	0.0150		
			1039.900	0.0650		
			1054.000	0.1000		
			1059.200	0.0510		
			1158.000	0.0270		
			1197.300	0.0230		
			1261.300	0.0170		
			1328.000	0.0600		
			1334.600	0.0440		
			1345.900	0.1890		
			1363.500	0.0420		
			1402.100	0.0360		
			1405.000	0.0930		
			1441.100	0.0130		
			1453.000	0.1200		
			1761.400	0.0380		
			1775.800	0.0510		
			1851.400	0.0160		
			1868.300	0.0380		
			1922.800	0.0200		
			1988.200	0.0230		
			2094.300	0.0220		
			2305.400	0.0200		
			2403.200	0.0670		
			2462.800	0.0410		
			2560.600	0.0370		
			2602.500	0.0320		
			2811.200	0.0410		
			2864.300	0.0230		
			2932.900	0.0430		
			3105.100	0.0210		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
120 I	53	1.350 h	433.000	0.0036	0.8714	0.6442
			477.900	0.0020		
			485.100	0.0020		
			542.700	0.0109		
			560.400	0.7300		
			601.100	0.0580		
			614.000	0.0066		
			641.100	0.0910		
			653.000	0.0022		
			662.100	0.0112		
			701.400	0.0030		
			713.000	0.0015		
			729.200	0.0030		
			735.300	0.0035		
			743.100	0.0035		
			752.000	0.0030		
			764.000	0.0030		
			853.300	0.0017		
			874.700	0.0015		
			881.800	0.0036		
			908.500	0.0028		
			921.300	0.0069		
			969.100	0.0019		
			975.100	0.0161		
			979.600	0.0039		
			1039.000	0.0051		
			1085.900	0.0015		
			1101.000	0.0041		
			1158.000	0.0044		
			1168.800	0.0058		
			1201.600	0.0193		
			1255.400	0.0080		
			1283.400	0.0036		
			1299.400	0.0042		
			1302.700	0.0082		
			1363.500	0.0066		
			1383.000	0.0051		
			1410.900	0.0131		
			1422.900	0.0080		
			1441.100	0.0022		
			1451.700	0.0051		
			1492.000	0.0044		
			1523.000	0.1120		
			1534.900	0.0204		
			1543.000	0.0117		
			1547.500	0.0091		
			1552.200	0.0036		
			1605.000	0.0073		
			1663.600	0.0036		
			1674.000	0.0051		
			1761.400	0.0066		
			1764.000	0.0051		
			1769.000	0.0022		
			1775.800	0.0082		
			1790.000	0.0131		
			1851.400	0.0026		
			1868.300	0.0058		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
120 I	53	1.350 h	1874.700	0.0058	0.8714	0.6442
			1895.000	0.0058		
			1911.000	0.0058		
			1922.800	0.0029		
			1935.000	0.0030		
			1983.400	0.0044		
			2034.000	0.0036		
			2045.000	0.0022		
			2082.000	0.0095		
			2094.300	0.0036		
			2109.100	0.0055		
			2129.400	0.0080		
			2142.000	0.0036		
			2158.000	0.0036		
			2172.000	0.0073		
			2181.000	0.0051		
			2188.000	0.0139		
			2218.000	0.0022		
			2305.400	0.0029		
			2375.300	0.0036		
			2378.400	0.0048		
			2404.000	0.0100		
			2454.800	0.0204		
			2462.800	0.0066		
			2491.800	0.0102		
			2510.000	0.0030		
			2526.000	0.0030		
			2564.400	0.0196		
			2602.500	0.0051		
			2638.000	0.0022		
			2654.000	0.0022		
			2697.200	0.0036		
			2740.000	0.0044		
			2747.000	0.0030		
			2778.000	0.0036		
			2800.000	0.0030		
			2811.200	0.0066		
			2829.000	0.0022		
			2864.300	0.0036		
			2932.900	0.0070		
			2939.000	0.0030		
			2987.000	0.0044		
			3029 000	0.0036		
			3047.000	0.0131		
			3082.000	0.0030		
			3098.000	0.0036		
			3105.100	0.0036		
			3160.000	0.0022		
			3182.000	0.0066		
			3334.000	0.0022		
			3395.000	0.0030		
			3442.000	0.0022		
			3545.000	0.0030		
			3580.000	0.0030		
120 Xe	54	40.000 m	40.900	0.0067	0.1917	0.1508
			40.900	0.0015		
			51.500	0.0043		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
120 Xe	54	40.000 m	69.600	0.0094	0.1917	0.1508
			72.600	0.0900		
			77.200	0.0400		
			81.100	0.0052		
			86.100	0.0058		
			88.700	0.0018		
			89.800	0.0179		
			97.000	0.0019		
			99.000	0.0054		
			99.000	0.0160		
			101.300	0.0012		
			124.800	0.0014		
			128.800	0.0157		
			133.500	0.0025		
			139.900	0.0066		
			146.900	0.0028		
			164.900	0.0030		
			172.200	0.0099		
			172.200	0.0036		
			174.500	0.0040		
			176.000	0.0094		
			176.000	0.0450		
			178.100	0.0670		
			195.300	0.0013		
			200.800	0.0031		
			203.500	0.0022		
			205.800	0.0034		
			221.600	0.0050		
			246.300	0.0023		
			271.800	0.0014		
			277.500	0.0037		
			279.600	0.0038		
			282.900	0.0014		
			285.500	0.0011		
			295.600	0.0112		
			302.300	0.0011		
			309.600	0.0058		
			315.800	0.0017		
			317.200	0.0021		
			322.500	0.0013		
			323.700	0.0015		
			331.400	0.0016		
			335.900	0.0104		
			342.100	0.0025		
			346.900	0.0054		
			350.200	0.0043		
			359.500	0.0094		
			365.700	0.0011		
			375.500	0.0023		
			376.500	0.0013		
			385.000	0.0094		
			401.400	0.0022		
			404.000	0.0014		
			424.200	0.0121		
			426.900	0.0035		
			429.400	0.0022		
			439.700	0.0019		
			446.400	0.0011		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
120 Xe	54	40.000 m	449.200	0.0166	0.1917	0.1508
			451.100	0.0027		
			457.600	0.0011		
			464.100	0.0014		
			465.700	0.0031		
			467.200	0.0053		
			476.000	0.0058		
			478.400	0.0033		
			481.400	0.0015		
			489.700	0.0022		
			504.500	0.0027		
			504.500	0.0040		
			506.900	0.0018		
			516.200	0.0030		
			529.400	0.0138		
			535.900	0.0019		
			540.800	0.0025		
			551.400	0.0014		
			555.600	0.0148		
			562.500	0.0024		
			569.000	0.0038		
			572.400	0.0033		
			574.200	0.0022		
			580.600	0.0077		
			590.400	0.0157		
			594.200	0.0054		
			596.400	0.0025		
			604.800	0.0032		
			627.700	0.0018		
			631.100	0.0104		
			638.500	0.0030		
			647.800	0.0039		
			652.400	0.0011		
			656.700	0.0024		
			663.600	0.0012		
			664.700	0.0044		
			678.900	0.0164		
			682.600	0.0056		
			685.500	0.0024		
			689.000	0.0014		
			694.700	0.0013		
			697.000	0.0017		
			726.000	0.0049		
			744.100	0.0014		
			745.400	0.0016		
			748.400	0.0106		
			753.300	0.0145		
			762.500	0.0450		
			793.400	0.0130		
			811.700	0.0073		
			820.400	0.0022		
			822.600	0.0024		
			825.400	0.0035		
			850.700	0.0020		
			852.100	0.0044		
			863.400	0.0061		
			867.100	0.0023		
			869.700	0.0011		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
120 Xe	54	40.000 m	872.600	0.0015	0.1917	0.1508
			875.700	0.0085		
			884.000	0.0011		
			885.200	0.0032		
			921.100	0.0029		
			930.450	0.0022		
			940.500	0.0034		
			965.500	0.0120		
			971.000	0.0031		
			989.100	0.0058		
			998.400	0.0017		
			1023.300	0.0033		
			1029.400	0.0027		
			1033.200	0.0047		
121 Te	52	17.000 d	37.138	0.0012	0.3210	0.2399
			65.548	0.0026		
			470.472	0.0141		
			507.591	0.1770		
			573.139	0.8030		
121 Te m	52	154.000 d	37.138	0.0094	0.1068	0.0958
			212.190	0.8150		
			1102.149	0.0250		
121 I	53	2.120 h	212.500	0.8420	0.1340	0.1179
			230.400	0.0030		
			244.300	0.0010		
			279.000	0.0015		
			319.700	0.0100		
			382.200	0.0049		
			471.500	0.0086		
			475.000	0.0100		
			531.900	0.0616		
			594.000	0.0037		
			598.700	0.0154		
			695.400	0.0017		
			699.700	0.0019		
			806.900	0.0024		
			936.800	0.0019		
			1014.500	0.0029		
122 In	49	1.500 s	1141.100	0.2900	0.1756	0.1286
122 In m	49	10.000 s	103.600	0.7040	1.6135	1.2032
			163.200	0.4280		
			243.900	0.0480		
			407.600	0.0600		
			877.900	0.0950		
			1001.700	1.0000		
			1121.800	0.5500		
			1141.000	1.0000		
122 Sb	51	2.700 d	564.240	0.7004	0.2527	0.1881
			692.650	0.0382		
			1140.670	0.0074		
			1256.930	0.0081		
122 I	53	3.620 m	564.000	0.1770	0.0793	0.0588

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
122 I	53	3.620 m	683.500	0.0085	0.0793	0.0588
			692.600	0.0131		
			793.000	0.0124		
			1257.000	0.0027		
			1499.500	0.0015		
			1747.200	0.0030		
			2193.000	0.0024		
122 Xe	54	20.100 h	61.800	0.0037	0.0251	0.0227
			72.600	0.0019		
			90.700	0.0061		
			116.300	0.0010		
			148.800	0.0310		
			163.300	0.0015		
			174.700	0.0016		
			175.700	0.0033		
			187.100	0.0062		
			201.600	0.0013		
			253.700	0.0012		
			288.400	0.0047		
			350.200	0.0780		
			355.200	0.0018		
			416.900	0.0180		
123 In	49	5.970 s	174.180	0.0019	0.5179	0.3791
			223.500	0.0012		
			284.700	0.0017		
			425.400	0.0017		
			536.400	0.0090		
			618.800	0.0019		
			845.500	0.0013		
			931.200	0.0030		
			957.300	0.0040		
			1019.700	0.2800		
			1130.500	0.5700		
			1131.000	0.0020		
			1382.300	0.0112		
			2001.200	0.0027		
123 Sn m	50	40.080 m	160.330	0.8500	0.0670	0.0674
123 Sn	50	129.200 d	1088.640	0.0060	0.0035	0.0026
123 Te	52	119.700 d	159.000	0.8400	0.0655	0.0661
123 I	53	13.200 h	158.970	0.8280	0.0721	0.0710
			346.350	0.0013		
			440.020	0.0042		
			505.330	0.0031		
			528.960	0.0138		
			538.540	0.0038		
123 Xe	54	2.080 h	138.000	0.0025	0.1772	0.1468
			148.900	0.4880		
			178.000	0.1530		
			330.200	0.0890		
			474.200	0.0010		
			680.500	0.0020		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
123 Xe	54	2.080 h	691.500	0.0010	0.1772	0.1468
			718.500	0.0017		
			782.900	0.0045		
			870.700	0.0029		
			899.600	0.0246		
			934.900	0.0030		
			964.000	0.0054		
			979.400	0.0029		
			1011.300	0.0044		
			1013.500	0.0012		
			1048.900	0.0014		
			1060.700	0.0079		
			1064.300	0.0066		
			1093.400	0.0280		
			1113.000	0.0157		
			1161.300	0.0010		
			1242.000	0.0010		
			1242.000	0.0045		
			1310.300	0.0013		
			1390.900	0.0012		
			1534.900	0.0030		
			1603.900	0.0017		
			1625.900	0.0059		
			1656.800	0.0013		
			1686.800	0.0060		
			1715.900	0.0019		
			1732.200	0.0014		
			1807.300	0.0124		
			1822.300	0.0012		
			1884.500	0.0064		
			1934.200	0.0022		
			1974.300	0.0014		
			2003.300	0.0019		
			2037.600	0.0024		
			2071.900	0.0017		
			2101.300	0.0016		
124 Sb m	51	1.550 m	498.400	0.1974	0.2021	0.1504
			602.720	0.2000		
			645.800	0.2000		
			1101.000	0.0032		
124 Sb	51	60.200 d	400.030	0.0053	0.9549	0.7047
			443.990	0.0035		
			525.500	0.0031		
			602.720	0.9792		
			632.360	0.0016		
			645.820	0.0721		
			709.310	0.0142		
			713.820	0.0239		
			722.780	0.1126		
			735.850	0.0013		
			790.780	0.0074		
			968.250	0.0183		
			1045.240	0.0184		
			1325.490	0.0141		
			1355.170	0.0093		
			1368.230	0.0235		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
124 Sb	51	60.200 d	1376.100	0.0043	0.9549	0.7047
			1436.660	0.0102		
			1445.250	0.0021		
			1489.030	0.0055		
			1526.330	0.0039		
			1579.900	0.0020		
			1691.020	0.4880		
			2091.000	0.0558		
124 I	53	4.180 d	541.200	0.0019	0.4359	0.3214
			602.720	0.6100		
			645.820	0.0095		
			695.000	0.0012		
			713.800	0.0011		
			722.780	0.1010		
			968.220	0.0041		
			976.320	0.0010		
			1045.000	0.0043		
			1054.000	0.0012		
			1325.500	0.0145		
			1368.200	0.0029		
			1376.000	0.0168		
			1488.900	0.0018		
			1509.490	0.0301		
			1559.800	0.0016		
			1637.700	0.0020		
			1675.800	0.0011		
			1691.020	0.1050		
			1720.370	0.0017		
			1851.400	0.0021		
			1918.580	0.0016		
			2038.300	0.0034		
			2078.860	0.0035		
			2091.000	0.0057		
			2099.090	0.0014		
			2144.320	0.0011		
			2232.250	0.0057		
			2283.250	0.0066		
			2746.900	0.0046		
124 Cs	55	26.500 s	354.300	0.3990	0.0963	0.0838
			492.500	0.0360		
			847.000	0.0120		
125 Sn m	50	9.520 m	331.900	1.0000	0.1978	0.1803
			589.600	0.0021		
			643.000	0.0016		
			1017.300	0.0010		
			1368.800	0.0010		
			1404.000	0.0072		
			1483.900	0.0019		
			1615.300	0.0012		
125 Sn	50	9.640 d	332.000	0.0130	0.1626	0.1196
			350.900	0.0023		
			469.700	0.0130		
			800.500	0.0100		
			822.600	0.0390		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
125 Sn	50	9.640 d	893.700	0.0024	0.1626	0.1196
			915.500	0.0390		
			934.700	0.0015		
			1017.100	0.0027		
			1066.600	0.0890		
			1087.400	0.0100		
			1088.900	0.0420		
			1151.300	0.0011		
			1173.200	0.0020		
			1221.000	0.0022		
			1419.500	0.0048		
			1805.700	0.0015		
			2001.700	0.0210		
			2275.200	0.0019		
125 Sb	51	2.772 y	35.460	0.0431	0.2403	0.1853
			116.940	0.0033		
			172.600	0.0026		
			176.290	0.0670		
			204.070	0.0027		
			208.000	0.0019		
			227.700	0.0012		
			321.000	0.0045		
			380.500	0.0150		
			408.000	0.0013		
			427.900	0.2950		
			443.300	0.0029		
			463.400	0.1030		
			600.600	0.1760		
			606.700	0.0484		
			636.000	0.1130		
			671.500	0.0172		
125 Te	52	58.000 d	35.460	0.0667	0.0040	0.0016
			109.270	0.0028		
125 I	53	60.140 d	35.492	0.0667	0.0039	0.0014
125 Xe m	54	57.000 s	111.000	0.6250	0.0438	0.0470
			141.000	0.1950		
125 Xe	54	17.000 h	54.960	0.0590	0.1212	0.1082
			74.860	0.0012		
			113.570	0.0040		
			188.430	0.5500		
			243.400	0.2890		
			372.080	0.0025		
			453.830	0.0423		
			511.000	0.0052		
			635.800	0.0023		
			846.500	0.0103		
			901.500	0.0054		
			937.300	0.0012		
			992.500	0.0010		
			1007.500	0.0014		
			1138.400	0.0029		
			1180.800	0.0035		
125 Cs	55	45.000 m	112.000	0.0600	0.1645	0.1256

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
125 Cs	55	45.000 m	412.000	0.0600	0.1645	0.1256
			428.000	0.0178		
			526.000	0.2772		
			540.000	0.0350		
			600.000	0.0350		
			712.000	0.0400		
			1158.000	0.0049		
			1200.000	0.0020		
			1212.000	0.0039		
			1311.000	0.0025		
			1326.000	0.0010		
			1468.000	0.0030		
			1579.000	0.0032		
			1698.000	0.0032		
			2154.000	0.0020		
			2523.000	0.0014		
126 Sn	50	100068.493 y	42.640	0.0050	0.0211	0.0229
			64.280	0.0960		
			86.940	0.0890		
			87.570	0.3700		
126 Sb m	51	19.000 m	414.500	0.8600	0.8858	0.6661
			620.000	0.0154		
			666.100	0.8600		
			694.800	0.8200		
			928.200	0.0130		
			1034.900	0.0180		
			1061.600	0.0051		
			1476.100	0.0034		
126 Sb	51	12.400 d	149.300	0.0030	1.6131	1.2001
			223.800	0.0170		
			278.600	0.0190		
			297.300	0.0500		
			414.800	0.8567		
			414.800	0.0200		
			555.200	0.0200		
			573.800	0.0687		
			593.000	0.0877		
			620.200	0.0130		
			639.700	0.0150		
			656.300	0.0260		
			666.300	0.9962		
			675.000	0.0418		
			695.000	0.9962		
			697.000	0.3188		
			720.500	0.5778		
			856.700	0.1700		
			954.000	0.0140		
			959.600	0.0050		
			989.300	0.0677		
			1034.800	0.0100		
			1061.300	0.0040		
			1063.900	0.0060		
			1213.000	0.0230		
			1476.200	0.0030		
126 I	53	13.020 d	388.633	0.3400	0.2337	0.1802

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
126 I	53	13.020 d	491.243	0.0285	0.2337	0.1802
			666.331	0.3310		
			753.819	0.0420		
			879.876	0.0075		
			1420.190	0.0030		
126 Cs	55	1.640 m	388.500	0.3800	0.1214	0.1004
			492.000	0.1300		
127 Sn	50	2.100 h	66.400	0.0014	0.9896	0.7352
			70.300	0.0038		
			83.400	0.0019		
			97.200	0.0045		
			104.100	0.0019		
			110.100	0.0038		
			119.700	0.0216		
			141.900	0.0042		
			143.700	0.0049		
			152.500	0.0133		
			155.600	0.0023		
			156.900	0.0027		
			169.200	0.0201		
			178.000	0.0011		
			181.100	0.0015		
			184.000	0.0045		
			184.700	0.0110		
			190.100	0.0057		
			202.800	0.0076		
			204.100	0.0023		
			205.200	0.0023		
			208.000	0.0015		
			211.500	0.0011		
			212.900	0.0011		
			220.400	0.0030		
			228.400	0.0019		
			232.200	0.0083		
			234.300	0.0053		
			235.300	0.0027		
			255.300	0.0011		
			262.500	0.0231		
			266.200	0.0212		
			271.500	0.0011		
			279.300	0.0057		
			282.000	0.0053		
			284.300	0.0270		
			292.900	0.0125		
			301.700	0.0011		
			331.700	0.0045		
			348.400	0.0049		
			353.300	0.0011		
			357.000	0.0019		
			360.600	0.0019		
			362.700	0.0042		
			365.500	0.0019		
			378.900	0.0019		
			390.500	0.0125		
			396.900	0.0034		
			405.000	0.0045		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
127 Sn	50	2.100 h	407.100	0.0151	0.9896	0.7352
			420.700	0.0015		
			425.700	0.0023		
			438.200	0.0610		
			444.700	0.0045		
			446.300	0.0023		
			452.100	0.0038		
			468.700	0.0045		
			487.500	0.0045		
			490.900	0.0530		
			493.200	0.0310		
			500.700	0.0151		
			509.000	0.0140		
			509.700	0.0076		
			513.900	0.0027		
			518.200	0.0019		
			528.500	0.0011		
			530.600	0.0011		
			539.600	0.0023		
			545.400	0.0227		
			563.400	0.0015		
			565.800	0.0011		
			570.100	0.0057		
			583.300	0.0320		
			592.300	0.0201		
			609.500	0.0030		
			616.100	0.0023		
			621.900	0.0045		
			631.600	0.0053		
			634.900	0.0027		
			649.100	0.0080		
			668.600	0.0019		
			702.600	0.0015		
			708.700	0.0019		
			759.100	0.0015		
			773.700	0.0042		
			805.900	0.0820		
			823.100	0.1060		
			824.700	0.0610		
			847.600	0.0019		
			859.500	0.0800		
			865.000	0.0034		
			889.000	0.0034		
			898.800	0.0019		
			912.400	0.0011		
			916.500	0.0117		
			929.700	0.0034		
			976.100	0.0076		
			979.200	0.0720		
			980.300	0.0076		
			981.400	0.0038		
			997.900	0.0193		
			1002.600	0.0174		
			1036.100	0.0197		
			1044.900	0.0027		
			1055.500	0.0023		
			1093.300	0.0380		
			1095.600	0.1900		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
127 Sn	50	2.100 h	1114.300	0.3800	0.9896	0.7352
			1134.500	0.0011		
			1142.000	0.0019		
			1159.200	0.0091		
			1160.400	0.0240		
			1179.200	0.0049		
			1220.500	0.0053		
			1237.400	0.0011		
			1292.100	0.0076		
			1295.500	0.0015		
			1360.300	0.0015		
			1368.400	0.0053		
			1434.400	0.0030		
			1458.400	0.0027		
			1471.200	0.0076		
			1472.500	0.0120		
			1491.900	0.0030		
			1562.800	0.0034		
			1584.300	0.0178		
			1600.000	0.0015		
			1610.800	0.0015		
			1647.800	0.0102		
			1666.500	0.0049		
			1673.700	0.0042		
			1709.900	0.0027		
			1720.000	0.0019		
			1750.700	0.0019		
			1752.800	0.0027		
			1783.400	0.0011		
			1812.800	0.0011		
			1824.100	0.0034		
			2003.400	0.0530		
			2073.500	0.0019		
			2102.400	0.0049		
			2160.000	0.0030		
			2184.500	0.0023		
			2304.200	0.0011		
			2317.400	0.0110		
			2335.100	0.0015		
			2389.500	0.0011		
			2447.500	0.0034		
			2470.000	0.0011		
			2513.900	0.0011		
			2584.900	0.0155		
			2695.900	0.0163		
			2805.700	0.0038		
			2846.400	0.0095		
			2881.100	0.0027		
127 Sb	51	3.850 d	61.100	0.0143	0.3901	0.2937
			154.300	0.0015		
			252.400	0.0850		
			280.400	0.0066		
			290.800	0.0201		
			293.300	0.0029		
			310.000	0.0026		
			391.800	0.0095		
			412.100	0.0380		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
127 Sb	51	3.850 d	441.000	0.0070	0.3901	0.2937
			445.100	0.0432		
			451.000	0.0018		
			456.000	0.0011		
			473.000	0.2570		
			502.800	0.0080		
			543.300	0.0290		
			584.200	0.0033		
			603.500	0.0443		
			637.800	0.0044		
			652.300	0.0037		
			667.500	0.0073		
			682.300	0.0050		
			685.700	0.3660		
			698.500	0.0362		
			722.200	0.0187		
			783.700	0.1500		
			817.000	0.0040		
			820.600	0.0022		
			924.400	0.0051		
			1141.600	0.0037		
			1290.300	0.0037		
127 Te	52	9.350 h	360.300	0.0013	0.0027	0.0022
			417.900	0.0099		
127 Xe m	54	1.167 m	124.700	0.6100	0.0642	0.0659
			172.500	0.3400		
127 Xe	54	36.410 d	57.600	0.0133	0.1349	0.1253
			145.220	0.0429		
			172.100	0.2550		
			202.840	0.6830		
			374.960	0.1720		
127 Cs	55	6.250 h	124.700	0.1800	0.2050	0.1705
			174.900	0.0025		
			196.200	0.0040		
			286.600	0.0380		
			321.300	0.0090		
			411.000	0.6300		
			461.800	0.0520		
			586.700	0.0450		
			804.000	0.0040		
			929.000	0.0040		
			1181.000	0.0010		
			1196.000	0.0023		
			1260.000	0.0010		
			1305.000	0.0020		
			1409.000	0.0012		
128 Sn	50	59.100 m	32.100	0.0520	0.3575	0.2766
			45.700	0.1410		
			75.100	0.3000		
			152.700	0.0710		
			160.400	0.0450		
			404.400	0.0640		
			436.700	0.0450		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R**2/h/Ci	Γ Rem/h/Ci
128 Sn	50	59.100 m	482.300	0.6400	0.3575	0.2766
			557.300	0.1790		
			680.500	0.1730		
128 Sb m	51	10.400 m	193.500	0.0100	1.1296	0.8577
			314.000	0.9500		
			594.100	0.0340		
			743.240	1.0000		
			753.900	1.0000		
			787.600	0.0740		
			844.000	0.0230		
			908.300	0.0240		
			1040.900	0.0230		
			1098.400	0.0030		
			1101.800	0.0040		
			1141.700	0.0080		
			1158.000	0.0180		
			1354.600	0.0060		
			1585.200	0.0030		
			1608.500	0.0050		
128 Sb	51	9.010 h	102.800	0.0040	1.7469	1.3061
			118.400	0.0060		
			152.600	0.0050		
			204.400	0.0100		
			214.800	0.0190		
			227.300	0.0150		
			235.000	0.0030		
			249.700	0.0060		
			278.300	0.0060		
			314.100	0.6100		
			317.700	0.0300		
			322.400	0.0300		
			357.000	0.0150		
			366.100	0.0150		
			404.300	0.0100		
			445.700	0.0150		
			454.500	0.0150		
			459.500	0.0150		
			526.500	0.4500		
			582.900	0.0100		
			594.300	0.0100		
			603.000	0.0170		
			628.700	0.3100		
			636.200	0.3600		
			654.200	0.1700		
			667.100	0.0250		
			683.900	0.0300		
			692.900	0.0200		
			727.600	0.0400		
			743.300	1.0000		
			754.000	1.0000		
			773.200	0.0150		
			802.700	0.0120		
			813.600	0.1300		
			835.300	0.0100		
			845.800	0.0250		
			860.800	0.0040		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
128 Sb	51	9.010 h	878.000	0.0350	1.7469	1.3061
			908.800	0.0100		
			972.300	0.0100		
			1047.500	0.0350		
			1078.600	0.0200		
			1112.700	0.0200		
			1129.600	0.0080		
			1158.200	0.0130		
			1181.600	0.0450		
			1250.500	0.0100		
			1259.500	0.0100		
			1339.800	0.0100		
			1378.000	0.0180		
			1593.200	0.0050		
			1685.700	0.0050		
			1707.900	0.0030		
			1785.500	0.0040		
128 I	53	24.990 m	442.910	0.1600	0.0480	0.0381
			526.620	0.0153		
			743.500	0.0014		
			969.400	0.0038		
128 Cs	55	3.900 m	443.000	0.3400	0.1107	0.0872
			526.500	0.0250		
			613.500	0.0032		
			969.500	0.0054		
			1139.900	0.0140		
			1304.900	0.0016		
			1631.000	0.0012		
			2157.200	0.0020		
128 Ba	56	2.430 d	273.000	0.2000	0.0302	0.0283
129 Sb	51	4.320 h	96.100	0.0017	0.7247	0.5331
			116.200	0.0017		
			146.600	0.0022		
			180.800	0.0255		
			244.700	0.0052		
			268.600	0.0026		
			295.500	0.0104		
			359.400	0.0290		
			363.000	0.0043		
			405.000	0.0139		
			453.500	0.0078		
			499.600	0.0022		
			523.800	0.0160		
			544.700	0.1810		
			633.700	0.0277		
			654.300	0.0303		
			669.800	0.0082		
			683.600	0.0580		
			737.100	0.0039		
			761.000	0.0380		
			773.400	0.0277		
			786.600	0.0191		
			812.800	0.4330		
			876.200	0.0260		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
129 Sb	51	4.320 h	914.600	0.2020	0.7247	0.5331
			939.700	0.0074		
			966.400	0.0780		
			995.400	0.0013		
			1030.100	0.1270		
			1093.800	0.0052		
			1104.300	0.0022		
			1167.800	0.0026		
			1208.500	0.0091		
			1237.400	0.0026		
			1257.000	0.0035		
			1261.300	0.0074		
			1273.000	0.0026		
			1280.800	0.0056		
			1300.000	0.0026		
			1317.200	0.0035		
			1325.900	0.0052		
			1418.600	0.0052		
			1436.100	0.0030		
			1479.700	0.0048		
			1525.900	0.0043		
			1540.000	0.0013		
			1568.700	0.0069		
			1598.500	0.0052		
			1621.100	0.0026		
			1654.600	0.0100		
			1724.100	0.0026		
			1736.500	0.0600		
			1869.900	0.0030		
			2069.600	0.0056		
			2113.000	0.0035		
129 Te	52	69.600 m	208.960	0.0017	0.0298	0.0234
			250.620	0.0037		
			278.430	0.0054		
			281.260	0.0016		
			459.600	0.0740		
			487.390	0.0135		
			802.100	0.0018		
			1083.850	0.0047		
			1111.640	0.0018		
129 Te m	52	33.600 d	105.500	0.0015	0.0157	0.0115
			556.650	0.0012		
			695.880	0.0310		
			729.570	0.0071		
129 I	53	1.571E+07 y	39.580	0.0750	0.0036	0.0018
129 Xe	54	8.000 d	39.580	0.0750	0.0084	0.0063
			196.560	0.0470		
129 Cs	55	1.336 d	39.581	0.0299	0.1420	0.1198
			93.329	0.0066		
			177.036	0.0027		
			266.820	0.0027		
			270.352	0.0021		
			278.614	0.0133		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
129 Cs	55	1.336 d	282.131	0.0024	0.1420	0.1198
			318.180	0.0246		
			371.918	0.3080		
			411.490	0.2250		
			548.945	0.0342		
			588.549	0.0061		
			906.425	0.0022		
130 In	49	0.530 s	127.000	0.8000	1.1212	0.8350
			775.000	1.0000		
			1217.000	1.0000		
130 Sn m	50	1.700 m	43.800	0.0310	0.1721	0.1410
			60.200	0.0480		
			63.100	0.0480		
			84.700	0.1430		
			144.900	0.3400		
			311.300	0.1390		
			543.600	0.0990		
			899.200	0.1670		
130 Sn	50	3.720 m	70.000	0.3600	0.5117	0.4021
			192.500	0.7100		
			229.200	0.2400		
			316.400	0.0142		
			341.300	0.0210		
			384.400	0.0142		
			434.700	0.1420		
			472.000	0.0071		
			550.500	0.0320		
			726.000	0.0071		
			743.100	0.1870		
			779.800	0.5900		
130 Sb m	51	6.300 m	182.300	0.4100	1.4832	1.0935
			348.500	0.0510		
			369.300	0.0230		
			370.000	0.0200		
			405.200	0.0050		
			468.000	0.0310		
			481.600	0.0190		
			502.600	0.0190		
			627.100	0.0510		
			647.700	0.0480		
			647.900	0.0270		
			658.000	0.0070		
			697.400	0.0440		
			748.900	0.0400		
			793.400	0.8600		
			816.300	0.1200		
			839.400	1.0000		
			861.600	0.0040		
			920.800	0.0400		
			942.200	0.0280		
			949.800	0.0100		
			985.400	0.0160		
			1017.500	0.3000		
			1039.600	0.0100		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
130 Sb m	51	6.300 m	1046.500	0.0280	1.4832	1.0935
			1071.700	0.0220		
			1102.800	0.0370		
			1131.900	0.0130		
			1142.000	0.0560		
			1177.300	0.0220		
			1200.000	0.0360		
			1232.300	0.0130		
			1298.900	0.0080		
			1323.100	0.0040		
			1491.200	0.0130		
			1598.000	0.0260		
			1896.900	0.0130		
			1925.700	0.0040		
130 Sb	51	40.000 m	182.300	0.6500	1.7951	1.3594
			258.000	0.0400		
			285.300	0.0350		
			303.300	0.0580		
			330.900	0.7800		
			455.400	0.0480		
			462.500	0.0080		
			468.000	0.1800		
			483.600	0.0220		
			506.700	0.0200		
			595.500	0.0100		
			626.700	0.0280		
			635.700	0.0160		
			654.700	0.0200		
			658.200	0.0170		
			669.200	0.0110		
			680.900	0.0650		
			686.600	0.0320		
			732.000	0.2200		
			793.400	1.0000		
			829.800	0.0180		
			839.400	1.0000		
			855.700	0.0160		
			883.400	0.0120		
			914.900	0.0180		
			926.000	0.0040		
			934.900	0.1900		
			992.000	0.0190		
			1000.200	0.0230		
			1030.700	0.0150		
			1075.500	0.0040		
			1089.500	0.0370		
			1134.200	0.0040		
			1137.600	0.0030		
			1141.400	0.0200		
			1146.200	0.0060		
			1239.000	0.0180		
			1258.500	0.0100		
			1292.300	0.0370		
			1368.700	0.0100		
			1419.300	0.0120		
			1443.700	0.0250		
			1473.000	0.0060		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
130 Sb	51	40.000 m	1488.400	0.0060	1.7951	1.3594
			1499.600	0.0040		
			1521.000	0.0080		
			1533.700	0.0090		
			1561.600	0.0060		
			1581.900	0.0190		
			1617.000	0.0090		
			1626.600	0.0060		
			1655.600	0.0080		
			1749.800	0.0030		
			1762.600	0.0250		
			1884.400	0.0070		
			1948.000	0.0120		
			1997.400	0.0210		
			2023.300	0.0040		
130 I m	53	9.000 m	536.000	0.1670	0.0603	0.0453
			586.000	0.0114		
			1122.150	0.0018		
			1614.000	0.0048		
130 I	53	12.360 h	418.010	0.3420	1.2132	0.9003
			457.720	0.0024		
			510.350	0.0085		
			536.090	0.9900		
			539.100	0.0140		
			553.900	0.0066		
			586.050	0.0169		
			603.530	0.0061		
			668.540	0.9610		
			685.990	0.0107		
			739.480	0.8230		
			800.230	0.0010		
			808.290	0.0024		
			877.350	0.0019		
			967.020	0.0088		
			1096.480	0.0055		
			1122.150	0.0025		
			1157.470	0.1131		
			1222.560	0.0018		
			1272.120	0.0075		
			1403.900	0.0034		
130 Cs	55	29.900 m	536.000	0.0410	0.0230	0.0171
			586.000	0.0050		
			894.500	0.0041		
			1615.000	0.0027		
			1687.400	0.0021		
			1707.000	0.0015		
			1997.300	0.0018		
130 Ba	56	0.011 s	80.300	0.0670	1.2654	0.9647
			357.200	1.0000		
			420.300	0.0300		
			452.500	0.0300		
			463.000	0.1300		
			544.500	0.8500		
			550.700	0.0300		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
130 Ba	56	0.011 s	652.500	0.0700	1.2654	0.9647
			691.000	0.7600		
			802.900	0.0900		
			883.000	0.6600		
			1004.000	0.0500		
			1111.000	0.0250		
130 La	57	8.700 m	196.200	0.0020	0.7070	0.5475
			234.420	0.0011		
			267.730	0.0059		
			357.300	0.8100		
			367.000	0.0028		
			453.000	0.0370		
			459.140	0.0087		
			464.000	0.0062		
			483.600	0.0104		
			502.150	0.0018		
			521.840	0.0150		
			544.430	0.1760		
			550.640	0.2700		
			569.450	0.0330		
			601.460	0.0031		
			649.370	0.0166		
			655.590	0.0017		
			692.630	0.0032		
			718.000	0.0290		
			789.300	0.0035		
			840.240	0.0023		
			869.230	0.0158		
			908.000	0.1740		
			936.500	0.0087		
			942.760	0.0103		
			956.850	0.0048		
			974.770	0.0310		
			984.750	0.0028		
			1003.570	0.0810		
			1120.000	0.0205		
			1151.360	0.0037		
			1170.840	0.0390		
			1177.160	0.0217		
			1200.000	0.0310		
			1409.750	0.0045		
			1438.670	0.0240		
			1444.890	0.0095		
			1487.160	0.0079		
			1525.400	0.0690		
			1721.590	0.0207		
131 Sb	51	23.000 m	134.600	0.0240	0.9095	0.6684
			159.900	0.0044		
			301.400	0.0220		
			323.800	0.0110		
			326.000	0.0110		
			619.700	0.0150		
			642.300	0.2200		
			669.000	0.0180		
			726.300	0.0380		
			824.900	0.0250		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
131 Sb	51	23.000 m	854.600	0.0310	0.9095	0.6684
			866.000	0.0044		
			911.000	0.0066		
			933.100	0.2500		
			943.400	0.4400		
			958.600	0.0057		
			991.500	0.0130		
			1050.500	0.0060		
			1123.600	0.0830		
			1207.400	0.0380		
			1233.800	0.0220		
			1249.100	0.0048		
			1267.500	0.0280		
			1331.800	0.0079		
			1360.400	0.0090		
			1391.900	0.0070		
			1398.900	0.0128		
			1455.100	0.0044		
			1470.300	0.0145		
			1517.200	0.0114		
			1538.000	0.0040		
			1544.200	0.0080		
			1553.400	0.0050		
			1559.000	0.0040		
			1573.500	0.0097		
			1608.800	0.0130		
			1722.000	0.0229		
			1756.100	0.0106		
			1821.300	0.0114		
			1854.400	0.0400		
			1916.200	0.0070		
			1956.500	0.0070		
			1965.700	0.0120		
			1984.900	0.0040		
			2017.000	0.0060		
			2031.000	0.0022		
			2115.900	0.0018		
			2149.800	0.0050		
			2167.500	0.0031		
			2179.900	0.0210		
			2255.400	0.0066		
			2335.000	0.0176		
			2354.500	0.0031		
			2398.900	0.0106		
			2496.600	0.0062		
			2552.000	0.0035		
			2662.300	0.0101		
131 Te	52	25.000 m	149.716	0.6890	0.2196	0.1794
			151.100	0.0017		
			342.945	0.0070		
			381.059	0.0090		
			452.323	0.1822		
			492.660	0.0484		
			544.880	0.0043		
			567.330	0.0010		
			602.039	0.0420		
			605.550	0.0012		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
131 Te	52	25.000 m	654.260	0.0153	0.2196	0.1794
			696.190	0.0018		
			727.000	0.0047		
			841.990	0.0020		
			856.080	0.0013		
			898.540	0.0014		
			934.483	0.0088		
			948.542	0.0226		
			951.390	0.0033		
			997.250	0.0334		
			1007.960	0.0080		
			1098.250	0.0017		
			1146.960	0.0496		
			1148.510	0.0011		
			1277.440	0.0012		
			1294.340	0.0048		
			1427.140	0.0011		
			1500.620	0.0012		
131 Te m	52	1.250 d	79.190	0.0013	0.7597	0.5675
			81.140	0.0406		
			86.430	0.0015		
			101.600	0.0017		
			102.060	0.0790		
			134.860	0.0071		
			149.710	0.0510		
			159.060	0.0013		
			182.250	0.0073		
			182.250	0.0085		
			183.110	0.0016		
			188.130	0.0021		
			189.760	0.0050		
			190.520	0.0012		
			200.630	0.0754		
			213.980	0.0042		
			230.650	0.0019		
			240.930	0.0758		
			253.170	0.0065		
			255.440	0.0031		
			269.200	0.0011		
			278.560	0.0178		
			283.200	0.0039		
			309.470	0.0038		
			334.270	0.0960		
			335.440	0.0014		
			342.920	0.0039		
			351.300	0.0021		
			354.700	0.0023		
			364.980	0.0120		
			383.900	0.0020		
			417.400	0.0028		
			432.400	0.0066		
			452.300	0.0150		
			462.920	0.0182		
			468.160	0.0031		
			524.800	0.0014		
			530.700	0.0010		
			541.400	0.0011		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
131 Te m	52	1.250 d	586.300	0.0197	0.7597	0.5675
			602.090	0.0031		
			609.400	0.0014		
			655.050	0.0433		
			685.900	0.0016		
			695.620	0.0040		
			702.500	0.0039		
			713.100	0.0143		
			744.200	0.0159		
			773.670	0.3810		
			774.100	0.0054		
			782.490	0.0780		
			793.750	0.1380		
			822.780	0.0611		
			844.900	0.0015		
			852.210	0.0039		
			852.210	0.2060		
			856.050	0.0062		
			865.100	0.0019		
			872.300	0.0010		
			910.000	0.0329		
			920.620	0.0120		
			923.400	0.0012		
			941.270	0.0078		
			987.800	0.0016		
			999.200	0.0017		
			1035.400	0.0010		
			1059.690	0.0155		
			1125.460	0.1140		
			1127.960	0.0097		
			1148.890	0.0150		
			1148.890	0.0042		
			1150.900	0.0066		
			1165.500	0.0014		
			1206.600	0.0970		
			1237.320	0.0066		
			1315.160	0.0070		
			1340.600	0.0010		
			1394.830	0.0011		
			1646.010	0.0124		
			1887.700	0.0135		
			2000.940	0.0201		
			2168.540	0.0035		
			2270.650	0.0038		
131 I	53	8.040 d	80.183	0.0262	0.2158	0.1856
			177.210	0.0026		
			284.298	0.0606		
			325.781	0.0025		
			364.480	0.8120		
			502.991	0.0036		
			636.973	0.0727		
			642.703	0.0022		
			722.893	0.0180		
131 Xe	54	11.900 d	163.930	0.0196	0.0016	0.0016
131 Ba m	56	14.600 m	79.050	0.0130	0.0269	0.0293

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
131 Ba m	56	14.600 m	108.450	0.5500	0.0269	0.0293
131 Ba	56	11.800 d	78.755	0.0075	0.2369	0.1944
			92.301	0.0064		
			123.803	0.2910		
			133.607	0.0219		
			157.150	0.0020		
			216.090	0.1990		
			239.630	0.0241		
			246.920	0.0060		
			249.440	0.0281		
			294.540	0.0015		
			351.150	0.0012		
			373.250	0.1330		
			404.040	0.0129		
			480.380	0.0034		
			486.480	0.0189		
			496.280	0.4400		
			572.660	0.0016		
			585.020	0.0123		
			620.050	0.0157		
			674.410	0.0013		
			696.460	0.0015		
			831.630	0.0022		
			923.860	0.0070		
			1046.900	0.0020		
			1047.560	0.0119		
131 La	57	59.000 m	80.100	0.0078	0.2114	0.1775
			108.450	0.2310		
			160.900	0.0200		
			177.300	0.0018		
			209.700	0.0290		
			209.700	0.0055		
			241.000	0.0140		
			245.600	0.0036		
			257.500	0.0350		
			285.700	0.1300		
			317.200	0.0113		
			353.300	0.0091		
			365.800	0.1600		
			402.600	0.0100		
			418.400	0.1820		
			434.400	0.0080		
			439.000	0.0027		
			454.200	0.0640		
			526.300	0.0980		
			561.700	0.0130		
			594.100	0.0160		
			611.100	0.0098		
			628.400	0.0016		
			658.200	0.0038		
			660.400	0.0038		
			718.600	0.0020		
			770.000	0.0013		
			841.300	0.0025		
			866.000	0.0120		
			879.000	0.0015		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
131 La	57	59.000 m	974.200	0.0073	0.2114	0.1775
			1178.000	0.0029		
			1292.000	0.0013		
			1387.000	0.0013		
			1698.000	0.0011		
131 Ce	58	10.000 m	119.200	0.0740	0.4169	0.3190
			145.200	0.0120		
			146.000	0.0020		
			169.400	0.2000		
			195.500	0.0100		
			244.800	0.0420		
			263.600	0.0060		
			271.200	0.0120		
			302.800	0.0040		
			326.300	0.0060		
			390.000	0.0100		
			392.200	0.0220		
			401.500	0.0040		
			404.000	0.0120		
			414.200	0.1060		
			433.000	0.0120		
			442.500	0.0220		
			470.400	0.0120		
			475.700	0.0320		
			478.000	0.0200		
			547.500	0.0240		
			582.300	0.0140		
			597.700	0.0140		
			601.800	0.0200		
			613.400	0.0080		
			638.300	0.0080		
			643.300	0.0080		
			651.400	0.0040		
			656.200	0.0100		
			679.000	0.0040		
			687.000	0.0020		
			692.500	0.0020		
			694.500	0.0020		
			701.700	0.0040		
			714.200	0.0060		
			718.500	0.0040		
			727.000	0.0080		
			731.000	0.0020		
			742.800	0.0020		
			749.000	0.0120		
			799.500	0.0060		
			813.000	0.0140		
			818.000	0.0040		
			835.000	0.0220		
			865.000	0.0220		
			878.400	0.0060		
			884.200	0.0240		
			902.700	0.0060		
			910.000	0.0140		
			928.400	0.0060		
			963.300	0.0120		
			973.300	0.0060		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
131 Ce	58	10.000 m	998.000	0.0200	0.4169	0.3190
			1058.300	0.0120		
			1068.800	0.0040		
			1073.000	0.0060		
			1129.200	0.0140		
			1165.000	0.0200		
			1236.800	0.0140		
			1300.000	0.0140		
			1356.800	0.0080		
			1381.000	0.0080		
			1412.400	0.0060		
			1417.500	0.0060		
			1428.000	0.0040		
			1449.000	0.0100		
			1469.000	0.0600		
			1480.800	0.0080		
			1488.000	0.0160		
			1529.500	0.0060		
			1694.700	0.0160		
			1714.800	0.0060		
			1775.500	0.0080		
			1805.900	0.0040		
			1872.500	0.0040		
			1893.800	0.0040		
132 Sn	50	40.000 s	65.500	0.4860	0.6990	0.5422
			246.700	0.4400		
			340.200	0.4400		
			528.700	0.0200		
			548.800	0.0200		
			651.900	0.0200		
			898.500	0.4200		
			992.200	0.3850		
			1077.800	0.0200		
			1238.800	0.1350		
132 Sb	51	2.800 m	103.400	0.1400	1.4237	1.0468
			138.500	0.0070		
			312.000	0.0070		
			353.800	0.0300		
			382.300	0.0800		
			436.800	0.0300		
			447.300	0.0200		
			609.900	0.0200		
			635.600	0.1000		
			696.800	0.8700		
			814.100	0.0500		
			816.600	0.1100		
			930.000	0.0100		
			973.900	1.0000		
			989.600	0.1500		
			1093.200	0.0500		
			1133.500	0.0600		
			1152.200	0.0300		
			1183.000	0.0130		
			1196.500	0.0300		
			1213.300	0.0200		
			1274.600	0.0120		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
132 Sb	51	2.800 m	1306.500	0.0100	1.4237	1.0468
			1436.300	0.0200		
			1454.000	0.0060		
			1513.500	0.0200		
			1540.400	0.0100		
			1575.000	0.0130		
			1634.000	0.0100		
			1644.500	0.0200		
			1788.000	0.0350		
			1890.900	0.0100		
			1893.700	0.0090		
			2280.400	0.0100		
			2588.300	0.0150		
			2633.800	0.0050		
			2913.200	0.0050		
132 Sb m	51	4.200 m	103.400	0.3500	1.3904	1.0433
			150.600	0.6600		
			276.000	0.0400		
			293.000	0.0400		
			368.600	0.0700		
			382.300	0.0700		
			496.500	0.1300		
			696.800	1.0000		
			881.900	0.0600		
			973.900	1.0000		
			1041.500	0.1800		
			1166.900	0.1000		
			1378.800	0.0400		
			1763.700	0.0400		
			1854.600	0.0200		
			2664.000	0.0400		
132 Te	52	3.258 d	49.720	0.1440	0.1154	0.1042
			111.760	0.0185		
			116.300	0.0194		
			228.150	0.3820		
132 I m	53	1.393 h	98.000	0.0370	0.1765	0.1318
			175.000	0.0830		
			310.000	0.0061		
			599.800	0.1320		
			610.000	0.0139		
			614.000	0.0240		
			667.700	0.1316		
			772.600	0.1310		
132 I	53	2.300 h	147.200	0.0024	1.2566	0.9209
			183.300	0.0016		
			254.800	0.0019		
			262.700	0.0144		
			284.800	0.0079		
			306.600	0.0011		
			316.500	0.0016		
			363.500	0.0049		
			387.800	0.0017		
			416.800	0.0046		
			431.900	0.0045		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
132 I	53	2.300 h	446.000	0.0067	1.2566	0.9209
			473.400	0.0027		
			487.500	0.0018		
			505.900	0.0503		
			522.650	0.1610		
			535.500	0.0052		
			547.100	0.0125		
			620.800	0.0039		
			621.200	0.0158		
			630.220	0.1370		
			650.600	0.0266		
			667.690	0.9870		
			669.800	0.0490		
			671.600	0.0520		
			727.000	0.0220		
			727.200	0.0320		
			729.500	0.0110		
			772.600	0.7620		
			780.200	0.0123		
			784.500	0.0042		
			809.800	0.0290		
			812.200	0.0560		
			863.300	0.0059		
			876.800	0.0108		
			910.300	0.0092		
			927.600	0.0044		
			954.550	0.1810		
			984.500	0.0056		
			1034.700	0.0057		
			1136.030	0.0296		
			1143.400	0.0138		
			1148.200	0.0021		
			1173.200	0.0109		
			1272.700	0.0015		
			1290.700	0.0114		
			1295.300	0.0197		
			1298.200	0.0089		
			1317.100	0.0012		
			1372.070	0.0247		
			1398.570	0.0710		
			1442.560	0.0142		
			1476.800	0.0014		
			1757.500	0.0038		
			1921.080	0.0118		
			2002.300	0.0109		
			2086.820	0.0025		
			2172.680	0.0019		
			2223.170	0.0012		
			2390.480	0.0017		
132 Cs	55	6.475 d	464.550	0.0187	0.3921	0.2869
			505.900	0.0080		
			567.140	0.0024		
			630.220	0.0101		
			667.670	0.9747		
			1031.700	0.0012		
			1136.030	0.0051		
			1317.800	0.0058		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
132 La	57	4.800 h	193.000	0.0115	0.7735	0.5814
			305.850	0.0051		
			360.660	0.0020		
			383.280	0.0043		
			464.550	0.7700		
			479.470	0.0223		
			498.790	0.0054		
			515.780	0.0510		
			540.360	0.0780		
			553.430	0.0021		
			567.140	0.1590		
			601.750	0.0035		
			645.050	0.0032		
			654.030	0.0035		
			663.070	0.0920		
			688.660	0.0027		
			697.680	0.0095		
			838.000	0.0011		
			856.410	0.0010		
			859.310	0.0027		
			881.570	0.0095		
			899.320	0.0470		
			918.680	0.0020		
			929.680	0.0020		
			940.870	0.0027		
			966.450	0.0040		
			994.380	0.0018		
			1031.700	0.0790		
			1036.920	0.0032		
			1046.560	0.0350		
			1150.000	0.0015		
			1173.120	0.0012		
			1188.350	0.0029		
			1198.670	0.0012		
			1208.480	0.0023		
			1221.230	0.0297		
			1242.060	0.0021		
			1246.810	0.0035		
			1264.770	0.0028		
			1342.810	0.0036		
			1396.990	0.0018		
			1439.800	0.0028		
			1533.660	0.0149		
			1537.000	0.0023		
			1581.750	0.0089		
			1604.030	0.0370		
			1800.340	0.0027		
			1824.080	0.0055		
			1876.670	0.0025		
			1909.910	0.0910		
			1948.740	0.0015		
			1998.380	0.0047		
			2082.390	0.0012		
			2102.840	0.0590		
			2187.550	0.0015		
			2296.180	0.0013		
			2367.080	0.0022		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
132 La	57	4.800 h	2391.350	0.0099	0.7735	0.5814
			2631.630	0.0025		
			2692.000	0.0055		
			2743.830	0.0015		
			2754.730	0.0162		
			2959.490	0.0095		
			3030.800	0.0016		
			3098.450	0.0049		
			3154.000	0.0011		
			3170.630	0.0028		
			3199.040	0.0072		
			3635.600	0.0034		
133 Te	52	12.450 m	312.100	0.7080	0.5007	0.4003
			384.600	0.0028		
			392.900	0.0057		
			407.900	0.3010		
			475.400	0.0120		
			546.400	0.0057		
			587.100	0.0050		
			613.600	0.0028		
			720.100	0.0670		
			787.400	0.0560		
			844.500	0.0330		
			931.100	0.0450		
			1000.300	0.0620		
			1021.000	0.0270		
			1061.800	0.0127		
			1252.000	0.0113		
			1307.700	0.0090		
			1313.500	0.0080		
			1333.400	0.0990		
			1405.600	0.0057		
			1474.000	0.0035		
			1518.600	0.0050		
			1588.200	0.0028		
			1717.500	0.0340		
			1825.100	0.0057		
			1881.800	0.0142		
			2136.500	0.0028		
			2228.000	0.0028		
133 Te m	52	55.400 m	74.100	0.0070	1.2492	0.9278
			81.500	0.0070		
			88.000	0.0261		
			94.900	0.0522		
			164.340	0.0139		
			168.870	0.1040		
			177.100	0.0130		
			178.200	0.0087		
			184.450	0.0035		
			193.220	0.0104		
			198.200	0.0052		
			213.360	0.0365		
			220.940	0.0043		
			224.030	0.0035		
			244.280	0.0061		
			251.490	0.0052		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
133 Te m	52	55.400 m	257.640	0.0087	1.2492	0.9278
			261.550	0.1220		
			334.140	0.0540		
			344.500	0.0130		
			347.220	0.0113		
			355.570	0.0052		
			362.810	0.0096		
			376.830	0.0052		
			396.960	0.0148		
			429.020	0.0313		
			444.900	0.0383		
			462.110	0.0296		
			471.850	0.0200		
			478.590	0.0157		
			519.600	0.0043		
			534.850	0.0174		
			574.040	0.0313		
			622.030	0.0139		
			647.400	0.2960		
			702.750	0.0374		
			731.690	0.0148		
			733.890	0.0287		
			779.750	0.0339		
			795.700	0.0130		
			800.510	0.0191		
			863.910	0.2520		
			882.830	0.0418		
			897.700	0.0043		
			912.580	0.8700		
			914.720	0.1650		
			934.400	0.0130		
			978.190	0.0810		
			980.400	0.0235		
			982.900	0.0113		
			1029.800	0.0157		
			1061.830	0.0270		
			1348.900	0.0252		
			1459.100	0.0217		
			1516.100	0.0096		
			1531.600	0.0087		
			1587.400	0.0191		
			1683.300	0.0583		
			1704.400	0.0096		
			1885.700	0.0113		
			2004.900	0.0470		
			2027.700	0.0122		
			2049.200	0.0148		
133 I m	53	9.000 s	73.000	0.0380	0.8781	0.6412
			647.000	1.0000		
			913.000	1.0000		
133 I	53	20.800 h	262.702	0.0036	0.3433	0.2579
			267.173	0.0012		
			345.430	0.0010		
			361.090	0.0011		
			417.556	0.0015		
			422.910	0.0031		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
133 I	53	20.800 h	510.530	0.0181	0.3433	0.2579
			529.872	0.8630		
			617.974	0.0054		
			680.247	0.0065		
			706.578	0.0149		
			768.382	0.0046		
			820.506	0.0015		
			856.278	0.0123		
			875.329	0.0447		
			909.670	0.0021		
			1052.296	0.0055		
			1060.070	0.0014		
			1236.411	0.0149		
			1298.223	0.0233		
			1350.380	0.0015		
133 Xe m	54	2.190 d	233.180	0.1030	0.0130	0.0117
133 Xe	54	5.245 d	79.621	0.0022	0.0136	0.0149
			81.000	0.3710		
133 Ba m	56	1.621 d	276.090	0.1800	0.0276	0.0259
133 Ba	56	10.747 y	53.155	0.0217	0.2024	0.1847
			79.621	0.0266		
			80.997	0.3350		
			160.605	0.0062		
			223.250	0.0046		
			276.397	0.0709		
			302.851	0.1840		
			356.005	0.6210		
			383.851	0.0891		
134 Sb	51	11.000 s	115.200	0.4900	1.0766	0.8334
			297.000	0.9700		
			706.300	0.5700		
			1279.000	1.0000		
134 Te	52	41.800 m	76.230	0.0029	0.4911	0.3863
			79.450	0.2090		
			101.420	0.0034		
			131.050	0.0015		
			180.890	0.1840		
			183.050	0.0060		
			201.240	0.0890		
			210.470	0.2240		
			259.590	0.0049		
			277.950	0.2180		
			435.060	0.1900		
			460.990	0.1110		
			464.640	0.0522		
			565.990	0.1930		
			636.260	0.0210		
			665.850	0.0104		
			712.970	0.0421		
			742.590	0.1500		
			767.200	0.3070		
			844.060	0.0120		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
134 Te	52	41.800 m	896.020	0.0018	0.4911	0.3863
			925.550	0.0169		
			1027.000	0.0046		
134 I m	53	3.700 m	44.400	0.1030	0.1447	0.1297
			234.300	0.0139		
			271.900	0.7900		
			316.300	0.0026		
			847.000	0.0200		
			884.000	0.0200		
134 I	53	52.600 m	135.399	0.0376	1.4228	1.0444
			139.030	0.0069		
			151.980	0.0011		
			162.480	0.0026		
			188.470	0.0070		
			217.000	0.0025		
			235.470	0.0198		
			278.800	0.0013		
			319.810	0.0052		
			351.080	0.0050		
			405.451	0.0730		
			411.000	0.0061		
			433.350	0.0419		
			458.920	0.0130		
			465.500	0.0036		
			488.880	0.0141		
			514.400	0.0234		
			540.825	0.0780		
			565.520	0.0088		
			570.750	0.0021		
			595.362	0.1140		
			621.790	0.1060		
			627.960	0.0237		
			677.340	0.0850		
			706.650	0.0083		
			730.740	0.0191		
			739.180	0.0076		
			766.680	0.0410		
			816.380	0.0052		
			847.025	0.9540		
			857.280	0.0696		
			864.000	0.0019		
			884.090	0.6530		
			922.600	0.0014		
			947.860	0.0404		
			966.900	0.0035		
			974.670	0.0470		
			1040.2[illegible]	0.0191		
			1072.550	0.1530		
			1100.070	0.0069		
			1103.180	0.0073		
			1136.160	0.0970		
			1159.100	0.0035		
			1164.000	0.0013		
			1190.030	0.0035		
			1239.000	0.0021		
			1269.490	0.0056		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R²m2/h/Ci	T Rem/h/Ci
134 I	53	52.600 m	1322.400	0.0010	1.4228	1.0444
			1336.000	0.0014		
			1352.620	0.0045		
			1414.300	0.0022		
			1428.200	0.0017		
			1431.350	0.0017		
			1455.240	0.0229		
			1470.000	0.0077		
			1505.500	0.0011		
			1541.510	0.0051		
			1613.800	0.0436		
			1629.240	0.0026		
			1644.250	0.0040		
			1655.190	0.0023		
			1741.490	0.0267		
			1806.840	0.0570		
			1925.880	0.0018		
			2020.600	0.0017		
			2159.900	0.0021		
			2312.400	0.0024		
			2467.400	0.0015		
134 Xe	54	0.290 s	232.900	0.6800	1.0197	0.7562
			845.900	1.0000		
			879.900	0.9400		
134 Cs m	55	2.900 h	127.420	0.1290	0.0075	0.0080
134 Cs	55	2.063 y	475.350	0.0146	0.8820	0.6466
			563.227	0.0838		
			569.315	0.1543		
			604.699	0.9760		
			795.845	0.8540		
			801.932	0.0873		
			1038.570	0.0100		
			1167.940	0.0180		
			1365.150	0.0304		
134 La	57	6.670 m	563.240	0.0037	0.0267	0.0197
			604.656	0.0500		
			1211.200	0.0012		
			1424.540	0.0018		
			1483.587	0.0013		
			1555.000	0.0040		
			1732.270	0.0023		
135 Te	52	19.200 s	266.800	0.1220	0.3910	0.2909
			603.500	0.8130		
			870.300	0.1870		
135 I	53	6.610 h	220.502	0.0175	0.7964	0.5886
			229.720	0.0023		
			264.260	0.0018		
			288.451	0.0309		
			290.270	0.0030		
			361.850	0.0019		
			403.030	0.0023		
			414.830	0.0030		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R²m2/h/Ci	T Rem/h/Ci
135 I	53	6.610 h	417.630	0.0352	0.7964	0.5886
			429.930	0.0030		
			433.741	0.0055		
			451.630	0.0032		
			546.557	0.0713		
			575.970	0.0013		
			649.850	0.0046		
			680.130	0.0013		
			707.920	0.0066		
			785.480	0.0015		
			797.710	0.0017		
			836.804	0.0667		
			961.460	0.0015		
			972.000	0.0089		
			972.600	0.0120		
			995.090	0.0015		
			1038.760	0.0790		
			1101.580	0.0160		
			1124.000	0.0361		
			1131.511	0.2250		
			1159.900	0.0010		
			1169.040	0.0087		
			1240.470	0.0090		
			1260.409	0.2860		
			1367.890	0.0061		
			1448.350	0.0031		
			1457.560	0.0860		
			1502.790	0.0107		
			1566.410	0.0129		
			1678.030	0.0950		
			1706.460	0.0409		
			1791.200	0.0770		
			1830.690	0.0058		
			1927.300	0.0030		
			2045.880	0.0087		
			2255.460	0.0061		
			2408.650	0.0095		
135 Xe m	54	15.290 m	526.571	0.8120	0.2466	0.1866
135 Xe	54	9.090 h	158.197	0.0029	0.1347	0.1184
			249.794	0.9013		
			358.390	0.0022		
			407.990	0.0036		
			608.185	0.0290		
135 Cs	55	53.000 m	780.000	1.0000	0.8919	0.6482
			840.000	0.9580		
135 Ba	56	1.196 d	268.238	0.1600	0.0237	0.0219
135 La	57	19.500 h	480.500	0.0156	0.0055	0.0042
			587.830	0.0010		
			874.500	0.0017		
135 Ce m	58	20.000 s	82.400	0.2162	0.1320	0.1258
			150.200	0.2120		
			212.800	0.7314		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
135 Ce m	58	20.000 s	295.200	0.1590	0.1320	0.1258
135 Ce	58	17.600 h	34.520	0.0730	0.4536	0.3577
			59.000	0.0014		
			86.970	0.0086		
			88.710	0.0096		
			118.030	0.0054		
			119.520	0.0186		
			132.880	0.0015		
			206.500	0.0900		
			265.560	0.4550		
			267.760	0.0070		
			299.110	0.0140		
			300.070	0.2400		
			343.010	0.0010		
			379.790	0.0157		
			387.810	0.0060		
			398.050	0.0050		
			400.020	0.0034		
			459.080	0.0012		
			465.200	0.0010		
			483.580	0.0200		
			485.020	0.0020		
			518.050	0.1370		
			528.350	0.0012		
			546.000	0.0067		
			562.790	0.0015		
			566.870	0.0062		
			572.260	0.1070		
			577.090	0.0518		
			604.560	0.0300		
			606.760	0.1960		
			621.850	0.0043		
			665.570	0.0020		
			665.790	0.0300		
			684.330	0.0038		
			712.350	0.0030		
			718.820	0.0040		
			772.900	0.0013		
			773.900	0.0022		
			777.890	0.0033		
			783.590	0.1060		
			828.380	0.0519		
			834.900	0.0010		
			845.060	0.0015		
			871.350	0.0324		
			905.870	0.0160		
			964.890	0.0033		
			1149.580	0.0066		
			1171.420	0.0019		
			1173.920	0.0019		
			1184.090	0.0110		
			1214.130	0.0010		
			1232.980	0.0010		
			1466.900	0.0022		
			1767.000	0.0012		
135 Nd	60	12.000 m	41.500	0.9100	0.3915	0.3145

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
135 Nd	60	12.000 m	112.600	0.4300	0.3915	0.3145
			164.700	0.0550		
			185.000	0.0350		
			204.000	0.6030		
			206.000	0.0360		
			221.000	0.0050		
			233.400	0.0140		
			245.400	0.0390		
			247.500	0.0020		
			256.000	0.0290		
			271.900	0.0270		
			316.700	0.0150		
			351.600	0.0100		
			372.800	0.0240		
			385.900	0.0150		
			415.000	0.0100		
			441.200	0.1500		
			442.700	0.0100		
			451.900	0.0450		
			475.800	0.0850		
			482.000	0.0180		
			490.300	0.0090		
			493.400	0.0150		
			501.600	0.1000		
			531.700	0.0200		
			572.000	0.0130		
			593.400	0.0200		
			616.500	0.0190		
			670.600	0.0060		
			739.400	0.0060		
			746.000	0.0100		
			777.700	0.0060		
			966.600	0.0270		
			1480.600	0.0120		
			1586.000	0.0080		
			1752.000	0.0480		
136 I m	53	46.000 s	197.300	0.7100	1.0170	0.7956
			370.000	0.1670		
			381.500	1.0000		
			481.300	0.0090		
			751.000	0.0110		
			812.900	0.0220		
			1313.200	1.0000		
136 I	53	1.383 m	219.500	0.0130	1.0392	0.7657
			345.400	0.0201		
			976.400	0.0370		
			1247.200	0.0250		
			1313.200	0.6700		
			1321.300	0.2500		
			1535.800	0.0180		
			1962.800	0.0250		
			2289.700	0.1130		
			2414.800	0.0680		
			2635.500	0.0680		
			2871.000	0.0400		
			2956.500	0.0087		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
136 I	53	1.383 m	3141.000	0.0090	1.0392	0.7657
			3210.000	0.004C		
			3244.000	0.0080		
136 Cs	55	13.100 d	66.910	0.1250	1.1818	0.8906
			86.290	0.0630		
			109.660	0.0041		
			153.220	0.0750		
			163.890	0.0462		
			166.530	0.0063		
			176.560	0.1360		
			187.250	0.0060		
			273.650	0.1270		
			319.870	0.0060		
			340.570	0.4680		
			507.210	0.0098		
			818.500	1.0000		
			1048.070	0.7970		
			1235.340	0.1980		
136 La	57	9.870 m	760.500	0.0025	0.0118	0.0086
			818.510	0.0200		
			1322.990	C.0023		
136 Pr	59	13.100 m	221.900	0.0013	0.7671	C.5711
			460.850	0.0770		
			523.900	0.0034		
			539.750	0.5200		
			552.160	0.7600		
			672.830	0.0024		
			761.300	0.0150		
			841.300	0.0076		
			855.920	0.0014		
			974.200	0.0034		
			991.000	0.0017		
			1000.800	0.0500		
			1012.100	0.0022		
			1032.400	0.0011		
			1041.500	0.0016		
			1063.200	0.0021		
			1091.900	0.1850		
			1203.800	0.0021		
			1282.400	0.0013		
			1359.800	0.0099		
			1368.300	0.0017		
			1425.000	0.0094		
			1503.300	0.0025		
			1514.800	0.0190		
			1590.300	0.0015		
			1602.800	0.039C		
			1628.200	0.0011		
			1677.900	0.0014		
			1735.700	0.0043		
			1773.800	0.0024		
			1886.700	0.0013		
			1899.000	0.0094		
			1919.300	0.0011		
			1965.100	0.0016		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
136 Pr	59	13.100 m	2042.700	0.0074	0.7671	0.5711
			2066.800	0.0300		
			2082.400	0.0018		
			2110.500	0.0013		
			2131.100	0.0021		
			2140.800	0.0018		
			2154.900	0.0034		
			2171.000	0.0021		
			2189.900	0.0021		
			2240.700	0.0068		
			2270.200	0.0036		
			2275.000	0.0024		
			2313.600	0.0063		
			2351.800	0.0030		
			2379.800	0.0029		
			2389.500	0.0011		
			2439.500	0.0013		
			2450.800	0.0071		
			2460.400	0.0013		
			2469.900	0.0014		
			2596.000	0.0016		
			2613.100	0.0011		
			2622.700	0.0013		
			2681.200	0.0013		
			2728.700	0.0013		
			2792.600	0.0011		
			2808.700	0.0018		
			3262.700	0.0045		
			3471.100	0.0011		
136 Nd	60	55.000 m	100.900	0.0180	0.0968	0.0815
			108.900	0.4000		
			130.900	0.0068		
			139.600	0.0024		
			144.500	0.0116		
			149.200	0.0760		
			184.800	0.0060		
			211.600	0.0024		
			241.000	0.0024		
			287.900	0.0024		
			294.700	0.0108		
			390.300	0.0084		
			498.800	0.0016		
			535.060	0.0112		
			574.830	0.1180		
			583.700	0.0016		
			605.600	0.0056		
			645.300	0.0056		
			653.400	0.0044		
			684.800	0.0016		
			754.800	0.0056		
			871.300	0.0020		
			941.900	0.0068		
			972.000	0.0112		
			1154.000	0.0032		
136 Pm	61	1.733 m	302.800	0.1400	1.0163	0.7788
			370.000	0.1040		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
136 Pm	61	1.783 m	373.500	0.9200	1.0163	0.7788
			488.000	0.0938		
			602.700	0.5100		
			678.000	0.0700		
			693.000	0.0267		
			696.000	0.1030		
			770.400	0.1840		
			815.000	0.3165		
			858.000	0.3220		
			862.000	0.0800		
			1060.000	0.1030		
			1070.000	0.0267		
137Cs+137Ba m	14	30.021 y	661.645	0.8505	0.3224	0.2357
137 Xe	54	3.830 m	298.000	0.0012	0.0912	0.0716
			393.350	0.0014		
			455.510	0.3000		
			848.840	0.0062		
			982.100	0.0020		
			1119.210	0.0010		
			1273.100	0.0019		
			1612.500	0.0012		
			1783.420	0.0039		
			2849.800	0.0017		
137 Ba	56	2.552 m	661.645	0.8990	0.3408	0.2492
137 Ce	58	9.000 h	436.500	0.0023	0.0042	0.0033
			447.100	0.0140		
137 Ce m	58	1.433 d	169.300	0.0016	0.0162	0.0142
			254.300	0.1080		
			824.900	0.0021		
137 Pr	59	1.277 h	160.320	0.0097	0.1045	0.0795
			329.040	0.0018		
			353.690	0.0058		
			433.890	0.0128		
			511.020	0.2500		
			513.980	0.0108		
			602.630	0.0031		
			665.160	0.0012		
			745.380	0.0019		
			763.180	0.0019		
			836.650	0.0180		
			866.520	0.0025		
			921.230	0.0017		
			1001.610	0.0011		
			1088.640	0.0042		
			1096.890	0.0020		
			1437.310	0.0025		
			1699.760	0.0013		
			1800.920	0.0016		
137 Nd	60	1.600 s	108.400	0.3400	0.1789	0.1697
			177.500	0.5700		
			233.700	0.6300		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
137 Nd	60	1.600 s	286.100	0.2000	0.1789	0.1697
138 I	53	6.330 s	483.670	0.0710	0.5615	0.4148
			588.870	0.9800		
			830.800	0.0380		
			875.290	0.1820		
			1277.700	0.0490		
			1463.200	0.0080		
			1809.500	0.0570		
			2398.300	0.0160		
138 I	53	6.400 s	482.700	0.4000	0.4505	0.3375
			589.000	1.0000		
138 Xe	54	14.170 m	153.750	0.0595	0.5307	0.4068
			242.560	0.0350		
			258.310	0.3150		
			282.510	0.0043		
			335.280	0.0011		
			371.440	0.0050		
			396.430	0.0630		
			401.360	0.0217		
			434.490	0.2030		
			500.220	0.0036		
			530.070	0.0025		
			537.760	0.0012		
			555.950	0.0012		
			568.530	0.0031		
			588.840	0.0012		
			654.080	0.0015		
			865.820	0.0030		
			869.350	0.0062		
			896.870	0.0013		
			912.510	0.0033		
			917.130	0.0092		
			936.250	0.0014		
			941.250	0.0023		
			1093.870	0.0041		
			1098.770	0.0021		
			1102.240	0.0011		
			1114.290	0.0147		
			1141.640	0.0051		
			1145.440	0.0013		
			1571.840	0.0026		
			1614.570	0.0024		
			1768.260	0.1670		
			1812.540	0.0018		
			1850.860	0.0142		
			1925.360	0.0056		
			2004.750	0.0535		
			2015.820	0.1230		
			2079.170	0.0144		
			2252.260	0.0229		
			2321.900	0.0062		
			2475.260	0.0031		
			2497.560	0.0017		
138 Cs m	55	2.900 m	79.900	0.0034	0.2747	0.2114

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
138 Cs m	55	2.900 m	107.500	0.0025	0.2747	0.2114
			112.500	0.0200		
			191.700	0.2000		
			212.000	0.0070		
			324.500	0.0150		
			408.800	0.0013		
			463.000	0.2500		
			516.200	0.0080		
			871.800	0.0020		
			1436.000	0.2500		
138 Cs	55	32.200 m	112.600	0.0013	1.1623	0.8623
			138.100	0.0149		
			191.960	0.0050		
			193.890	0.0033		
			212.320	0.0017		
			227.760	0.0151		
			324.900	0.0029		
			363.930	0.0024		
			365.290	0.0019		
			408.980	0.0466		
			421.590	0.0043		
			462.700	0.3070		
			516.740	0.0043		
			545.940	0.1076		
			683.590	0.0011		
			766.100	0.0015		
			773.310	0.0023		
			782.080	0.0033		
			871.800	0.0511		
			880.800	0.0011		
			935.030	0.0018		
			1009.780	0.2980		
			1054.320	0.0016		
			1147.220	0.0124		
			1199.150	0.0017		
			1203.690	0.0040		
			1264.940	0.0014		
			1343.590	0.0114		
			1415.680	0.0037		
			1435.860	0.7630		
			1445.040	0.0097		
			1495.630	0.0018		
			1555.310	0.0037		
			1614.090	0.0014		
			1717.100	0.0011		
			1727.680	0.0011		
			1778.350	0.0014		
			2023.930	0.0012		
			2062.340	0.0011		
			2210.700	0.0021		
			2218.000	0.1520		
			2499.400	0.0017		
			2583.150	0.0024		
			2639.590	0.0763		
			2731.120	0.0012		
			3339.010	0.0015		
			3366.980	0.0023		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
138 La	57	1.351E+11 y	788.400	0.3290	0.6289	0.4622
			1435.600	0.6710		
138 Ce	58	0.009 s	301.000	0.8415	1.1557	0.8734
			800.000	1.0000		
			1040.000	1.0000		
138 Pr	59	1.450 m	688.200	0.0082	0.0180	0.0132
			788.700	0.0240		
			1447.800	0.0013		
			1551.100	0.0042		
138 Pr m	59	2.100 h	75.500	0.0011	1.2118	0.9153
			79.400	0.0012		
			158.000	0.0011		
			170.000	0.0014		
			206.000	0.0016		
			231.000	0.0012		
			302.700	0.8000		
			351.000	0.0011		
			359.400	0.0024		
			390.900	0.0610		
			457.900	0.0050		
			547.500	0.0520		
			635.700	0.0178		
			680.800	0.0021		
			770.400	0.0066		
			788.700	1.0000		
			940.000	0.0050		
			1037.800	1.0100		
			1083.100	0.0020		
			1239.000	0.0012		
			1348.000	0.0033		
			1393.000	0.0012		
			1453.300	0.0026		
			1527.600	0.0017		
			1540.900	0.0016		
			1583.200	0.0012		
			1671.200	0.0010		
			1797.500	0.0010		
			1808.100	0.0025		
			1864.400	0.0021		
			2026.600	0.0019		
138 Nd	60	5.040 h	126.140	0.0011	0.0075	0.0070
			132.730	0.0018		
			194.210	0.0026		
			199.500	0.0056		
			215.310	0.0029		
			325.760	0.0290		
			341.650	0.0041		
138 Pm	61	3.500 m	437.000	0.0800	0.8798	0.6543
			493.000	0.2000		
			521.000	0.9300		
			729.000	0.3600		
			741.000	0.0560		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
138 Pm	61	3.500 m	809.000	0.0370	0.8798	0.6543
			829.000	0.0650		
			931.000	0.0560		
			971.000	0.0930		
			1014.000	0.0700		
			1015.000	0.0900		
			1137.000	0.0460		
			1280.000	0.0800		
			1675.000	0.0700		
139 Xe	54	39.500 s	71.000	0.0025	0.4195	0.3379
			103.750	0.0031		
			121.370	0.0037		
			174.970	0.1920		
			181.300	0.0050		
			218.590	0.5400		
			225.380	0.0280		
			289.780	0.0890		
			296.530	0.2100		
			338.860	0.0058		
			356.720	0.0048		
			393.500	0.0650		
			442.700	0.0015		
			454.460	0.0019		
			466.800	0.0070		
			491.470	0.0139		
			505.070	0.0031		
			513.880	0.0081		
			515.440	0.0050		
			549.020	0.0056		
			595.430	0.0019		
			601.840	0.0050		
			612.820	0.0530		
			626.890	0.0076		
			646.500	0.0057		
			652.280	0.0023		
			672.390	0.0014		
			675.790	0.0016		
			710.400	0.0017		
			716.960	0.0016		
			723.840	0.0174		
			730.500	0.0022		
			732.420	0.0170		
			745.160	0.0051		
			761.040	0.0019		
			786.700	0.0021		
			788.040	0.0320		
			801.620	0.0054		
			818.290	0.0027		
			832.410	0.0010		
			847.450	0.0024		
			879.740	0.0015		
			891.760	0.0021		
			896.300	0.0010		
			924.500	0.0011		
			942.610	0.0011		
			980.590	0.0016		
			986.020	0.0032		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
139 Xe	54	39.500 s	996.190	0.0031	0.4195	0.3379
			1006.250	0.0011		
			1017.700	0.0013		
			1046.310	0.0026		
			1067.560	0.0013		
			1105.600	0.0011		
			1114.480	0.0032		
			1137.520	0.0038		
			1149.200	0.0012		
			1178.730	0.0049		
			1190.600	0.0049		
			1199.430	0.0013		
			1206.450	0.0060		
			1219.330	0.0015		
			1242.880	0.0057		
			1259.260	0.0050		
			1289.470	0.0042		
			1291.400	0.0017		
			1297.850	0.0039		
			1316.400	0.0010		
			1324.380	0.0018		
			1344.930	0.0111		
			1362.910	0.0028		
			1367.190	0.0018		
			1386.190	0.0056		
			1404.160	0.0012		
			1416.940	0.0015		
			1428.700	0.0017		
			1434.130	0.0016		
			1448.700	0.0010		
			1453.320	0.0046		
			1458.980	0.0016		
			1490.000	0.0024		
			1503.100	0.0013		
			1520.170	0.0079		
			1579.500	0.0020		
			1609.300	0.0010		
			1612.500	0.0014		
			1615.000	0.0015		
			1641.700	0.0015		
			1652.800	0.0011		
			1670.330	0.0108		
			1681.100	0.0010		
			1699.800	0.0010		
			1711.440	0.0022		
			1773.840	0.0032		
			1790.850	0.0037		
			1793.000	0.0012		
			1803.990	0.0012		
			1814.100	0.0012		
			1816.700	0.0012		
			1851.900	0.0011		
			1854.500	0.0012		
			1857.600	0.0011		
			1862.400	0.0015		
			1864.000	0.0024		
			1895.980	0.0060		
			1911.420	0.0012		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
139 Xe	54	39.500 s	1967.300	0.0012	0.4195	0.3379
			1979.570	0.0051		
			1994.200	0.0010		
			2015.110	0.0015		
			2063.900	0.0040		
			2085.910	0.0065		
			2099.480	0.0012		
			2110.120	0.0028		
			2116.880	0.0032		
			2192.320	0.0033		
			2227.280	0.0036		
			2291.610	0.0039		
			2304.970	0.0028		
			2328.800	0.0061		
			2366.970	0.0013		
			2403.750	0.0025		
			2510.410	0.0026		
			2574.040	0.0033		
			2633.750	0.0010		
			2736.700	0.0011		
			2769.370	0.0029		
			2790.890	0.0026		
			2815.030	0.0022		
			2872.650	0.0012		
			2918.300	0.0012		
			3375.510	0.0015		
139 Cs	55	9.400 m	454.660	0.0013	0.1175	0.0866
			531.980	0.0021		
			567.720	0.0013		
			627.240	0.0150		
			827.520	0.0011		
			929.180	0.0023		
			946.460	0.0010		
			1190.420	0.0018		
			1283.230	0.0700		
			1306.090	0.0011		
			1308.130	0.0037		
			1321.770	0.0023		
			1410.580	0.0015		
			1420.660	0.0080		
			1620.740	0.0042		
			1680.720	0.0060		
			1698.660	0.0018		
			1877.450	0.0034		
			1887.570	0.0022		
			1904.500	0.0012		
			1933.480	0.0024		
			2020.760	0.0013		
			2089.910	0.0014		
			2110.910	0.0066		
			2173.980	0.0020		
			2349.920	0.0056		
			2380.660	0.0019		
			2531.840	0.0042		
			2605.750	0.0024		
			2649.320	0.0017		
			2847.630	0.0010		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
139 Cs	55	9.400 m	3464.340	0.0011	0.1175	0.0866
			3665.610	0.0014		
139 Ba	56	1.378 h	165.850	0.2200	0.0199	0.0194
			1420.500	0.0025		
139 Ce m	58	56.200 s	754.400	0.9250	0.3958	0.2878
139 Ce	58	137.660 d	165.853	0.7994	0.0658	0.0655
139 Pr	59	4.510 h	254.700	0.0022	0.0062	0.0046
			1347.400	0.0040		
			1375.300	0.0013		
			1630.600	0.0028		
139 Nd	60	29.700 m	113.870	0.0122	0.0729	0.0557
			183.500	0.0080		
			405.000	0.0600		
			411.500	0.0013		
			475.500	0.0111		
			485.000	0.0039		
			511.000	0.0260		
			588.800	0.0068		
			669.000	0.0129		
			916.900	0.0129		
			923.400	0.0110		
			1074.200	0.0210		
			1096.500	0.0032		
			1213.400	0.0027		
			1311.800	0.0026		
			1328.800	0.0024		
			1405.500	0.0052		
			1449.000	0.0013		
			1500.500	0.0021		
			1532.000	0.0011		
139 Nd m	60	5.500 h	93.000	0.0330	0.8321	0.6245
			101.200	0.0042		
			113.880	0.7600		
			147.900	0.0099		
			209.650	0.0209		
			214.600	0.0057		
			231.150	0.0076		
			254.600	0.0131		
			302.700	0.0060		
			340.500	0.0064		
			362.420	0.0237		
			403.750	0.0248		
			424.300	0.0081		
			547.650	0.0241		
			572.300	0.0078		
			601.200	0.0057		
			673.300	0.0064		
			701.200	0.0420		
			708.000	0.2650		
			738.200	0.3500		
			796.500	0.0420		
			802.000	0.0700		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
139 Nd m	60	5.500 h	809.600	0.0640	0.8321	0.6245
			822.000	0.0177		
			827.800	0.1040		
			852.000	0.0018		
			910.000	0.0760		
			982.200	0.2650		
			1006.200	0.0322		
			1012.300	0.0276		
			1024.900	0.0152		
			1075.200	0.0350		
			1105.300	0.0272		
			1219.600	0.0166		
			1226.700	0.0134		
			1322.300	0.0187		
			1344.800	0.0046		
			1374.700	0.0042		
			1463.600	0.0032		
			1470.200	0.0058		
			1510.500	0.0014		
			2060.900	0.0480		
140 Ba	56	12.740 d	132.670	0.0020	0.1010	0.0795
			162.609	0.0621		
			304.850	0.0430		
			423.722	0.0315		
			437.575	0.0193		
			467.570	0.0015		
			537.274	0.2439		
140 La	57	1.678 d	109.417	0.0020	1.1698	0.8745
			131.121	0.0049		
			173.544	0.0013		
			241.966	0.0047		
			266.551	0.0045		
			328.768	0.2074		
			432.520	0.0299		
			487.029	0.4590		
			751.830	0.0441		
			815.780	0.2364		
			867.840	0.0559		
			919.540	0.0268		
			925.190	0.0705		
			951.000	0.0054		
			1596.170	0.9540		
			2347.800	0.0085		
			2521.320	0.0343		
			2547.140	0.0010		
140 Pr	59	3.390 m	306.900	0.0019	0.0042	0.0032
			1596.500	0.0050		
141 Xe	54	1.720 s	68.980	0.0420	0.4279	0.3224
			81.810	0.0220		
			89.700	0.0064		
			100.760	0.0240		
			105.960	0.0810		
			118.710	0.1160		
			137.680	0.0073		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
141 Xe	54	1.720 s	187.610	0.0260	0.4279	0.3224
			254.320	0.0012		
			283.130	0.0040		
			286.060	0.0022		
			362.020	0.0087		
			369.450	0.0161		
			388.980	0.0152		
			422.100	0.0035		
			423.870	0.0122		
			434.850	0.0018		
			450.980	0.0014		
			452.650	0.0050		
			459.120	0.0450		
			467.800	0.0290		
			492.850	0.0067		
			507.300	0.0019		
			509.980	0.0077		
			538.010	0.0065		
			539.900	0.0520		
			551.680	0.0046		
			556.610	0.0470		
			576.770	0.0036		
			578.190	0.0013		
			594.330	0.0037		
			599.610	0.0013		
			604.600	0.0023		
			613.170	0.0081		
			629.500	0.0048		
			644.360	0.0067		
			649.230	0.0024		
			677.850	0.0025		
			729.010	0.0016		
			731.920	0.0073		
			745.190	0.0021		
			755.290	0.0116		
			773.080	0.0220		
			778.010	0.0026		
			791.960	0.0033		
			801.200	0.0014		
			805.360	0.0028		
			807.310	0.0022		
			823.370	0.0021		
			843.010	0.0041		
			854.740	0.0025		
			869.200	0.0029		
			874.610	0.0034		
			894.710	0.0080		
			898.200	0.0018		
			909.450	0.2200		
			914.270	0.0018		
			933.510	0.0014		
			942.800	0.0025		
			943.600	0.0021		
			944.800	0.0013		
			976.600	0.0012		
			979.980	0.0099		
			986.010	0.0037		
			989.500	0.0019		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
141 Xe	54	1.720 s	991.600	0.0021	0.4279	0.3224
			998.700	0.0016		
			1008.400	0.0042		
			1015.230	0.0033		
			1025.310	0.0022		
			1028.130	0.0170		
			1051.880	0.0104		
			1062.480	0.0019		
			1090.600	0.0022		
			1092.800	0.0019		
			1097.190	0.0044		
			1099.700	0.0044		
			1104.900	0.0016		
			1112.300	0.0011		
			1120.980	0.0073		
			1134.560	0.0030		
			1140.410	0.0011		
			1177.680	0.0015		
			1196.700	0.0019		
			1208.100	0.0014		
			1214.540	0.0028		
			1217.480	0.0044		
			1219.500	0.0016		
			1233.000	0.0018		
			1246.170	0.0029		
			1253.130	0.0021		
			1310.700	0.0013		
			1317.800	0.0012		
			1323.940	0.0013		
			1330.000	0.0010		
			1351.720	0.0023		
			1369.200	0.0078		
			1372.100	0.0018		
			1386.930	0.0013		
			1436.250	0.0057		
			1439.500	0.0018		
			1489.130	0.0024		
			1497.900	0.0011		
			1502.370	0.0038		
			1526.600	0.0012		
			1539.600	0.0011		
			1546.900	0.0012		
			1551.000	0.0015		
			1556.960	0.0290		
			1579.400	0.0013		
			1600.900	0.0013		
			1655.400	0.0015		
			1688.120	0.0026		
			1738.800	0.0013		
			1748.900	0.0011		
			1755.580	0.0054		
			1769.990	0.0039		
			1795.200	0.0015		
			1799.790	0.0029		
			1829.500	0.0015		
			1860.540	0.0021		
			1882.000	0.0012		
			1898.500	0.0014		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
141 Xe	54	1.720 s	1917.800	0.0017	0.4279	0.3224
			1933.900	0.0018		
			2016.300	0.0020		
			2020.270	0.0020		
			2058.100	0.0013		
			2109.300	0.0012		
			2172.800	0.0012		
			2210.390	0.0017		
			2217.300	0.0018		
			2236.600	0.0012		
			2282.700	0.0016		
			2394.200	0.0023		
			2410.600	0.0013		
			2430.100	0.0012		
			2547.170	0.0039		
			2577.200	0.0011		
			2601.100	0.0015		
			2629.500	0.0010		
			2635.200	0.0011		
			2682.300	0.0011		
			2709.570	0.0012		
			2734.200	0.0014		
			2839.200	0.0011		
141 Cs	55	24.940 s	48.540	0.0990	0.4608	0.3391
			55.000	0.0021		
			501.900	0.0018		
			555.110	0.0470		
			561.570	0.0580		
			569.800	0.0010		
			585.420	0.0036		
			588.650	0.0510		
			591.700	0.0017		
			605.130	0.0124		
			612.860	0.0042		
			638.760	0.0025		
			642.000	0.0012		
			646.180	0.0084		
			647.030	0.0084		
			649.140	0.0050		
			654.230	0.0091		
			660.710	0.0099		
			691.860	0.0370		
			698.170	0.0064		
			709.500	0.0019		
			771.770	0.0033		
			778.470	0.0033		
			806.200	0.0012		
			826.900	0.0016		
			895.100	0.0017		
			902.100	0.0031		
			938.500	0.0026		
			954.300	0.0011		
			972.900	0.0028		
			985.700	0.0019		
			1007.650	0.0055		
			1018.600	0.0021		
			1024.800	0.0021		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
141 Cs	55	24.940 s	1042.900	0.0011	0.4608	0.3391
			1056.140	0.0054		
			1061.790	0.0130		
			1068.100	0.0058		
			1072.260	0.0049		
			1097.770	0.0041		
			1117.100	0.0019		
			1140.600	0.0136		
			1147.080	0.0380		
			1153.600	0.0117		
			1166.000	0.0037		
			1171.500	0.0108		
			1177.490	0.0132		
			1182.100	0.0042		
			1194.040	0.0540		
			1195.600	0.0022		
			1200.400	0.0021		
			1209.500	0.0016		
			1214.380	0.0088		
			1226.410	0.0081		
			1229.500	0.0035		
			1232.600	0.0030		
			1264.000	0.0024		
			1277.400	0.0016		
			1290.000	0.0011		
			1315.700	0.0019		
			1343.900	0.0011		
			1360.400	0.0036		
			1432.390	0.0058		
			1449.300	0.0051		
			1453.700	0.0014		
			1497.200	0.0029		
			1517.600	0.0041		
			1524.000	0.0014		
			1572.200	0.0031		
			1575.300	0.0013		
			1606.100	0.0015		
			1625.000	0.0023		
			1630.100	0.0030		
			1653.800	0.0013		
			1661.570	0.0058		
			1715.100	0.0057		
			1750.800	0.0022		
			1757.100	0.0023		
			1765.100	0.0015		
			1773.200	0.0023		
			1783.100	0.0016		
			1789.600	0.0047		
			1808.400	0.0019		
			1819.300	0.0054		
			1826.400	0.0024		
			1842.400	0.0012		
			1852.500	0.0017		
			1868.900	0.0013		
			1885.300	0.0017		
			1894.000	0.0050		
			1906.200	0.0036		
			1918.400	0.0037		

Nuclide	Z	Half Life	Energy keV	Yield	R*m2/h/Ci	Rem/h/Ci
141 Cs	55	24.940 s	1933.500	0.0045	0.4608	0.3391
			1940.700	0.0064		
			1956.400	0.0015		
			1964.400	0.0021		
			1989.500	0.0025		
			1994.400	0.0038		
			1998.300	0.0021		
			2045.800	0.0027		
			2059.600	0.0049		
			2066.000	0.0050		
			2088.600	0.0041		
			2094.400	0.0028		
			2142.900	0.0034		
			2221.700	0.0014		
			2386.500	0.0029		
			2394.500	0.0016		
			2398.900	0.0023		
			2410.900	0.0013		
			2489.400	0.0019		
			2504.700	0.0013		
			2615.300	0.0012		
			2638.400	0.0011		
			2671.300	0.0011		
			2708.900	0.0016		
			2728.600	0.0014		
			2820.500	0.0028		
			2846.800	0.0021		
			2950.000	0.0023		
			2961.300	0.0026		
			2976.500	0.0019		
			3032.500	0.0012		
			3039.300	0.0030		
			3057.700	0.0025		
			3072.200	0.0068		
			3078.400	0.0037		
			3098.900	0.0010		
			3116.100	0.0036		
			3120.400	0.0011		
			3133.700	0.0044		
			3169.800	0.0012		
			3192.100	0.0045		
			3194.900	0.0025		
			3225.500	0.0021		
			3252.800	0.0018		
			3259.900	0.0023		
			3273.800	0.0017		
			3304.500	0.0013		
			3331.500	0.0021		
			3349.200	0.0019		
141 Ba	56	18.270 m	112.960	0.0093	0.4400	0.3575
			162.900	0.0044		
			180.700	0.0049		
			190.330	0.4600		
			276.950	0.2330		
			304.180	0.2520		
			343.660	0.1420		
			349.100	0.0029		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
141 Ba	56	18.270 m	364.700	0.0058	0.4400	0.3575
			381.310	0.0012		
			389.710	0.0132		
			457.590	0.0480		
			462.130	0.0480		
			467.260	0.0550		
			522.100	0.0043		
			524.100	0.0040		
			527.500	0.0038		
			572.000	0.0025		
			599.280	0.0023		
			608.910	0.0024		
			625.210	0.0330		
			635.900	0.0028		
			641.380	0.0036		
			647.890	0.0560		
			660.800	0.0028		
			670.040	0.0018		
			674.200	0.0011		
			675.700	0.0022		
			685.700	0.0013		
			687.800	0.0010		
			698.500	0.0028		
			700.000	0.0021		
			704.500	0.0030		
			739.000	0.0430		
			762.200	0.0014		
			778.200	0.0011		
			826.300	0.0033		
			831.600	0.0152		
			832.600	0.0016		
			867.900	0.0015		
			876.100	0.0340		
			880.600	0.0020		
			908.800	0.0012		
			929.400	0.0069		
			943.200	0.0073		
			981.500	0.0078		
			996.600	0.0012		
			1012.300	0.0010		
			1034.490	0.0029		
			1046.320	0.0034		
			1094.000	0.0022		
			1160.800	0.0024		
			1160.840	0.0092		
			1197.300	0.0460		
			1224.700	0.0041		
			1235.500	0.0014		
			1264.000	0.0082		
			1273.400	0.0052		
			1278.100	0.0066		
			1309.100	0.0023		
			1311.200	0.0060		
			1323.700	0.0094		
			1345.270	0.0022		
			1357.500	0.0016		
			1377.800	0.0070		
			1405.200	0.0027		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
141 Ba	56	18.270 m	1436.700	0.0082	0.4400	0.3575
			1458.600	0.0068		
			1501.400	0.0031		
			1551.000	0.0031		
			1568.800	0.0025		
			1653.700	0.0075		
			1682.300	0.0134		
			1712.900	0.0017		
			1735.300	0.0018		
			1740.800	0.0031		
			1795.400	0.0051		
			1912.700	0.0013		
			1989.600	0.0018		
			2026.400	0.0038		
			2136.700	0.0011		
			2164.700	0.0016		
			2469.000	0.0018		
141 La	57	3.930 h	1354.520	0.0263	0.0191	0.0141
			1693.300	0.0012		
141 Ce	58	32.500 d	145.440	0.4840	0.0336	0.0347
141 Nd m	60	1.040 m	756.500	0.9147	0.3924	0.2853
141 Nd	60	2.490 h	145.400	0.0024	0.0107	0.0079
			1126.910	0.0080		
			1147.300	0.0031		
			1292.640	0.0046		
			1298.600	0.0013		
141 Pm	61	20.900 m	193.670	0.0161	0.0900	0.0666
			289.000	0.0017		
			622.010	0.0087		
			886.220	0.0241		
			1023.200	0.0013		
			1029.600	0.0036		
			1223.260	0.0460		
			1345.520	0.0127		
			1371.000	0.0010		
			1403.140	0.0074		
			1564.680	0.0082		
			1596.870	0.0074		
			1626.700	0.0027		
			1880.000	0.0032		
			1967.600	0.0017		
			2052.900	0.0012		
			2073.790	0.0062		
			2303.500	0.0011		
141 Sm	62	10.200 m	324.400	0.0250	0.4497	0.3482
			403.900	0.4200		
			438.200	0.3800		
			728.400	0.0130		
			767.500	0.0115		
			854.300	0.0132		
			888.500	0.0064		
			1046.400	0.0149		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
141 Sm	62	10.200 m	1057.100	0.0330	0.4497	0.3482
			1091.900	0.0259		
			1292.600	0.0680		
			1336.500	0.0051		
			1352.700	0.0038		
			1446.600	0.0030		
			1463.900	0.0190		
			1481.000	0.0051		
			1495.700	0.0178		
			1499.100	0.0059		
			1515.300	0.0068		
			1565.900	0.0021		
			1587.900	0.0025		
			1599.900	0.0060		
			1600.700	0.0400		
			1634.100	0.0034		
			1885.000	0.0072		
			1902.400	0.0089		
			1992.300	0.0068		
			2004.800	0.0089		
			2037.800	0.0280		
141 Sm m	62	22.600 m	108.500	0.0020	0.8584	0.6537
			149.100	0.0029		
			196.600	0.7500		
			247.900	0.0078		
			431.800	0.4100		
			538.500	0.0850		
			577.800	0.0090		
			583.400	0.0029		
			607.900	0.0102		
			628.700	0.0270		
			648.700	0.0037		
			676.800	0.0139		
			684.600	0.0800		
			704.200	0.0045		
			725.700	0.0150		
			750.300	0.0160		
			764.300	0.0016		
			768.200	0.0016		
			777.400	0.2060		
			785.900	0.0690		
			805.900	0.0360		
			820.700	0.0016		
			837.100	0.0360		
			875.000	0.0127		
			882.000	0.0016		
			896.500	0.0147		
			911.300	0.0930		
			924.700	0.0230		
			952.100	0.0090		
			955.400	0.0069		
			974.100	0.0020		
			983.300	0.0740		
			995.800	0.0037		
			1009.100	0.0290		
			1029.600	0.0053		
			1108.400	0.0127		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
141 Sm m	62	22.600 m	1117.600	0.0330	0.8584	0.6537
			1145.100	0.0880		
			1267.600	0.0029		
			1380.900	0.0020		
			1434.900	0.0037		
			1463.400	0.0180		
			1490.300	0.0940		
			1786.400	0.1110		
			1898.000	0.0038		
			1979.600	0.0040		
			2073.700	0.0140		
141 Eu m	63	3.300 s	96.400	0.0068	0.0138	0.0106
			369.500	0.0029		
			394.000	0.0059		
			395.600	0.0011		
			433.900	0.0042		
			518.800	0.0043		
			804.400	0.0043		
			882.900	0.0053		
			887.300	0.0028		
			1595.300	0.0039		
141 Eu	63	40.000 s	202.300	0.0026	0.1717	0.1349
			213.500	0.0018		
			354.400	0.0022		
			369.500	0.0247		
			382.900	0.0450		
			384.500	0.0850		
			394.000	0.1370		
			395.600	0.0249		
			395.800	0.0025		
			433.900	0.0086		
			593.100	0.0450		
			594.700	0.0063		
			596.300	0.0077		
			597.900	0.0186		
			605.900	0.0144		
			606.000	0.0048		
			687.800	0.0029		
			699.000	0.0029		
			724.200	0.0025		
			764.900	0.0033		
			776.000	0.0041		
			799.600	0.0041		
			817.400	0.0012		
			882.900	0.0111		
			893.600	0.0012		
			935.700	0.0019		
			976.200	0.0026		
			990.000	0.0022		
			996.100	0.0056		
			999.800	0.0038		
			1052.000	0.0030		
			1053.400	0.0014		
			1081.900	0.0029		
			1083.600	0.0012		
			1234.400	0.0027		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
141 Eu	63	40.000 s	1245.400	0.0044	0.1717	0.1349
			1300.400	0.0030		
			1382.100	0.0033		
			1392.400	0.0021		
			1510.700	0.0053		
			1560.700	0.0014		
			1676.000	0.0023		
			1691.600	0.0021		
			1744.900	0.0041		
			1766.200	0.0062		
			1826.600	0.0036		
			1839.000	0.0033		
			2221.600	0.0026		
142 Ba	56	10.600 m	69.400	0.0041	0.5608	0.4249
			76.800	0.0100		
			77.600	0.1112		
			122.890	0.0107		
			154.220	0.0060		
			162.000	0.0012		
			176.820	0.0171		
			216.300	0.0023		
			222.600	0.0031		
			231.520	0.1180		
			242.700	0.0019		
			255.120	0.2060		
			269.330	0.0078		
			283.900	0.0021		
			286.200	0.0107		
			309.020	0.0260		
			334.800	0.0144		
			337.100	0.0029		
			346.700	0.0016		
			363.800	0.0460		
			379.100	0.0054		
			417.800	0.0039		
			425.030	0.0570		
			432.300	0.0113		
			434.400	0.0035		
			448.100	0.0025		
			457.300	0.0045		
			473.400	0.0035		
			488.300	0.0012		
			513.300	0.0027		
			531.900	0.0010		
			537.500	0.0012		
			558.300	0.0035		
			590.700	0.0029		
			599.840	0.0185		
			604.200	0.0037		
			769.400	0.0070		
			786.400	0.0029		
			792.200	0.0025		
			823.400	0.0047		
			840.230	0.0350		
			894.900	0.1270		
			948.750	0.1030		
			1000.860	0.0910		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
142 Ba	56	10.600 m	1032.800	0.0056	0.5608	0.4249
			1078.480	0.1080		
			1093.620	0.0260		
			1122.600	0.0035		
			1126.540	0.0177		
			1148.300	0.0045		
			1202.200	0.0620		
			1204.060	0.1580		
			1283.400	0.0019		
			1379.900	0.0390		
142 La	57	1.542 h	106.100	0.0016	1.2573	0.9250
			174.100	0.0010		
			367.300	0.0010		
			393.700	0.0010		
			420.800	0.0026		
			433.340	0.0042		
			514.700	0.0016		
			532.000	0.0016		
			578.090	0.0136		
			619.500	0.0016		
			641.170	0.5250		
			861.570	0.0200		
			878.200	0.0021		
			894.850	0.0940		
			946.500	0.0010		
			962.200	0.0042		
			991.200	0.0010		
			1006.700	0.0026		
			1011.380	0.0440		
			1039.200	0.0010		
			1043.680	0.0300		
			1061.800	0.0016		
			1070.300	0.0016		
			1074.200	0.0010		
			1088.900	0.0026		
			1112.600	0.0010		
			1116.700	0.0010		
			1130.600	0.0052		
			1144.500	0.0016		
			1160.160	0.0190		
			1174.300	0.0016		
			1190.900	0.0042		
			1231.500	0.0031		
			1233.110	0.0200		
			1242.300	0.0021		
			1264.700	0.0010		
			1270.100	0.0010		
			1288.000	0.0010		
			1323.200	0.0037		
			1332.300	0.0010		
			1354.600	0.0010		
			1362.950	0.0240		
			1373.600	0.0021		
			1389.300	0.0047		
			1395.300	0.0021		
			1402.200	0.0016		
			1445.500	0.0016		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
142 La	57	1.542 h	1455.100	0.0010	1.2573	0.9250
			1493.700	0.0016		
			1500.300	0.0010		
			1516.300	0.0047		
			1535.500	0.0026		
			1540.200	0.0052		
			1545.800	0.0330		
			1618.200	0.0031		
			1651.400	0.0021		
			1688.100	0.0026		
			1722.900	0.0170		
			1752.400	0.0010		
			1756.420	0.0330		
			1768.000	0.0021		
			1771.000	0.0021		
			1793.800	0.0010		
			1806.300	0.0016		
			1817.100	0.0010		
			1885.400	0.0058		
			1901.320	0.0870		
			1923.000	0.0026		
			1933.500	0.0016		
			1948.200	0.0052		
			1960.600	0.0016		
			2004.200	0.0105		
			2025.500	0.0136		
			2038.700	0.0110		
			2050.400	0.0052		
			2055.170	0.0290		
			2076.900	0.0073		
			2086.100	0.0042		
			2100.400	0.0105		
			2126.200	0.0037		
			2139.300	0.0058		
			2180.300	0.0058		
			2187.200	0.0580		
			2290.500	0.0037		
			2358.400	0.0084		
			2364.400	0.0047		
			2397.720	0.1640		
			2419.500	0.0021		
			2459.400	0.0042		
			2513.200	0.0016		
			2532.300	0.0010		
			2539.400	0.0079		
			2542.650	0.1120		
			2663.500	0.0079		
			2666.800	0.0190		
			2672.600	0.0021		
			2782.300	0.0031		
			2800.800	0.0063		
			2818.100	0.0084		
			2828.600	0.0026		
			2970.000	0.0079		
			2972.000	0.0330		
			2991.700	0.0010		
			2999.900	0.0052		
			3007.100	0.0021		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
142 La	57	1.542 h	3012.900	0.0073	1.2573	0.9250
			3022.300	0.0010		
			3034.300	0.0058		
			3046.900	0.0042		
			3062.400	0.0016		
			3075.900	0.0016		
			3155.000	0.0021		
			3181.000	0.0031		
			3236.700	0.0031		
			3242.400	0.0021		
			3273.200	0.0016		
			3314.700	0.0136		
			3401.900	0.0031		
			3459.300	0.0037		
			3612.100	0.0089		
			3632.700	0.0115		
			3719.100	0.0031		
			3850.400	0.0026		
142 Pr	59	19.130 h	1575.600	0.0370	0.0284	0.0210
142 Pm	61	40.500 s	641.400	0.0065	0.0289	0.0213
			1575.800	0.0330		
			2384.300	0.0011		
142 Sm	62	1.208 h	1243.000	0.0026	0.0026	0.0019
			1345.000	0.0013		
142 Eu	63	2.400 s	68.200	0.0062	0.1013	0.0742
			768.000	0.1120		
			889.600	0.0149		
			1287.400	0.0153		
			1405.200	0.0080		
			1658.100	0.0150		
			1754.100	0.0146		
			2055.500	0.0055		
142 Eu m	63	1.220 m	200.900	0.0110	1.4321	1.0509
			273.800	0.0120		
			474.400	0.0075		
			540.000	0.0500		
			556.600	0.8700		
			563.700	0.0830		
			580.700	0.0044		
			628.700	0.0410		
			741.200	0.0170		
			768.000	1.0000		
			832.600	0.0042		
			848.000	0.0040		
			886.700	0.0069		
			906.400	0.0050		
			954.300	0.0058		
			982.000	0.0024		
			1016.100	0.1100		
			1023.300	0.9200		
			1151.000	0.0035		
			1198.800	0.0039		
			1212.000	0.0047		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
142 Eu m	63	1.220 m	1341.900	0.0298	1.4321	1.0509
			1426.800	0.0078		
			1652.100	0.0029		
			1700.100	0.0083		
			1724.500	0.0012		
			1728.500	0.0020		
			1838.600	0.0044		
			1889.000	0.0015		
			1937.600	0.0051		
			2258.400	0.0064		
143 Cs	55	1.780 s	117.000	0.0033	0.0555	0.0439
			159.900	0.0012		
			195.000	0.0330		
			228.600	0.0066		
			232.300	0.0250		
			233.800	0.0026		
			237.500	0.0011		
			263.200	0.0100		
			272.800	0.0100		
			299.000	0.0026		
			302.500	0.0013		
			306.400	0.0170		
			388.800	0.0016		
			466.600	0.0130		
			527.400	0.0080		
			534.800	0.0033		
			570.700	0.0036		
			605.200	0.0043		
			612.000	0.0020		
			626.700	0.0080		
			659.900	0.0120		
			661.700	0.0120		
			729.300	0.0033		
			778.200	0.0013		
			792.700	0.0016		
			822.300	0.0013		
			833.700	0.0033		
			837.200	0.0016		
			867.900	0.0019		
			871.600	0.0012		
			1805.000	0.0016		
			1909.000	0.0016		
			1977.500	0.0046		
			2634.600	0.0013		
			2648.300	0.0013		
			2683.500	0.0013		
143 Ba	56	14.500 s	174.900	0.0019	0.1145	0.0874
			176.880	0.0029		
			178.560	0.0090		
			181.690	0.0021		
			208.310	0.0022		
			211.490	0.0650		
			218.750	0.0035		
			254.320	0.0068		
			261.560	0.0040		
			291.220	0.0220		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
143 Ba	56	14.500 s	297.020	0.0024	0.1145	0.0874
			310.770	0.0010		
			367.540	0.0052		
			397.590	0.0038		
			408.300	0.0014		
			424.840	0.0012		
			431.540	0.0078		
			435.870	0.0056		
			466.000	0.0028		
			482.880	0.0023		
			544.410	0.0027		
			577.050	0.0020		
			602.210	0.0015		
			613.680	0.0018		
			619.400	0.0021		
			633.730	0.0033		
			643.150	0.0026		
			667.070	0.0019		
			669.440	0.0018		
			713.500	0.0012		
			718.990	0.0110		
			764.880	0.0038		
			798.780	0.0360		
			853.940	0.0035		
			858.810	0.0028		
			884.100	0.0014		
			895.170	0.0094		
			925.030	0.0110		
			942.130	0.0021		
			980.450	0.0250		
			1010.250	0.0210		
			1037.600	0.0014		
			1116.200	0.0020		
			1196.360	0.0150		
			1367.200	0.0014		
			1407.870	0.0015		
			1443.300	0.0013		
			1649.230	0.0022		
			2016.100	0.0012		
			2055.800	0.0021		
			2296.700	0.0012		
			2347.200	0.0019		
143 La	57	14.230 m	620.600	0.0100	0.0352	0.0259
			621.700	0.0048		
			643.900	0.0070		
			774.900	0.0015		
			798.300	0.0048		
			1053.200	0.0026		
			1076.500	0.0015		
			1122.900	0.0014		
			1146.000	0.0031		
			1148.600	0.0040		
			1164.900	0.0014		
			1556.600	0.0042		
			1707.900	0.0016		
			1938.000	0.0016		
			1961.500	0.0040		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
143 La	57	14.230 m	1980.400	0.0014	0.0352	0.0259
			2004.100	0.0010		
			2500.000	0.0029		
			2625.000	0.0013		
143 Ce	58	1.375 d	57.365	0.1180	0.1377	0.1185
			169.000	0.0030		
			216.000	0.0021		
			231.560	0.0200		
			293.262	0.4200		
			338.000	0.0029		
			350.590	0.0340		
			433.020	0.0013		
			439.000	0.0012		
			490.360	0.0200		
			587.280	0.0024		
			664.550	0.0520		
			721.960	0.0510		
			880.390	0.0092		
			1102.980	0.0037		
143 Pm	61	265.000 d	741.980	0.3850	0.1623	0.1180
143 Sm	62	0.030 s	75.000	0.2500	0.8957	0.6886
			180.200	0.6100		
			208.900	0.5000		
			1574.000	0.6400		
			1703.000	0.2000		
			1754.000	0.0288		
			1829.000	0.1150		
143 Sm m	62	1.100 m	689.000	0.0020	0.3858	0.2805
			754.400	0.8998		
143 Sm	62	8.830 m	271.800	0.0028	0.0207	0.0153
			1056.500	0.0175		
			1173.400	0.0038		
			1243.100	0.0020		
			1403.200	0.0030		
			1514.900	0.0061		
143 Eu	63	2.630 m	107.700	0.0210	0.1647	0.1217
			203.100	0.0014		
			429.600	0.0011		
			607.600	0.0026		
			754.000	0.0022		
			805.300	0.0100		
			999.600	0.0055		
			1107.300	0.0750		
			1369.100	0.0090		
			1429.300	0.0035		
			1458.400	0.0116		
			1536.800	0.0330		
			1566.100	0.0060		
			1607.300	0.0101		
			1715.200	0.0017		
			1804.900	0.0166		
			1912.700	0.0213		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
143 Eu	63	2.630 m	1962.600	0.0023	0.1647	0.1217
			2070.300	0.0051		
			2102.500	0.0094		
			2228.000	0.0040		
			2270.800	0.0012		
143 Gd	64	39.000 s	204.770	0.1940	0.1938	0.1648
			258.810	0.7480		
			463.700	0.0990		
			554.100	0.0070		
			812.900	0.0540		
			1284.200	0.0100		
			1464.800	0.0090		
143 Gd m	64	1.867 m	117.570	0.0650	0.7261	0.5615
			131.100	0.0037		
			180.950	0.0059		
			210.900	0.0110		
			259.350	0.0060		
			271.940	0.8430		
			304.200	0.0101		
			389.470	0.0350		
			428.100	0.0025		
			497.300	0.0059		
			545.300	0.0059		
			588.000	0.1570		
			590.800	0.0034		
			594.300	0.0058		
			625.230	0.0118		
			668.100	0.0970		
			698.800	0.0038		
			776.800	0.0084		
			785.560	0.0550		
			798.890	0.1070		
			824.430	0.0500		
			830.100	0.0054		
			836.300	0.0056		
			845.500	0.0025		
			890.520	0.0177		
			906.960	0.0210		
			913.200	0.0051		
			916.530	0.0430		
			926.600	0.0055		
			984.930	0.0202		
			993.100	0.0046		
			1008.280	0.0135		
			1041.350	0.0300		
			1059.300	0.0084		
			1087.300	0.0080		
			1138.900	0.0081		
			1144.200	0.0080		
			1158.200	0.0056		
			1162.800	0.0076		
			1196.900	0.0089		
			1213.100	0.0056		
			1219.210	0.0410		
			1225.800	0.0025		
			1231.800	0.0067		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
143 Gd m	64	1.867 m	1276.900	0.0025	0.7261	0.5615
			1293.300	0.0084		
			1297.600	0.0035		
			1329.300	0.0025		
			1354.400	0.0051		
			1373.600	0.0119		
			1386.690	0.0126		
			1404.560	0.0290		
			1489.800	0.0066		
			1503.400	0.0118		
			1629.300	0.0194		
			1675.900	0.0048		
			1702.500	0.0110		
			1746.400	0.0076		
			1793.210	0.0261		
			1807.140	0.0770		
			1820.270	0.0300		
			1886.000	0.0076		
			2338.900	0.0025		
144 Cs	55	1.020 s	199.300	0.4400	0.0458	0.0432
144 Ba	56	11.900 s	103.700	0.2300	0.2276	0.2207
			155.900	0.4100		
			172.000	0.2700		
			291.200	1.0000		
144 La	57	40.700 s	139.500	0.0690	0.7218	0.5618
			165.500	0.1400		
			226.800	0.0210		
			314.300	0.0240		
			397.300	0.9800		
			431.500	0.0560		
			541.100	0.4100		
			585.000	0.1080		
			705.400	0.0490		
			735.300	0.1180		
			844.900	0.2800		
			951.400	0.0730		
			1294.900	0.0870		
144 Ce	58	284.300 d	33.570	0.0025	0.0080	0.0082
			40.930	0.0049		
			53.410	0.0012		
			80.120	0.0164		
			86.500	0.0035		
			91.000	0.0035		
			133.530	0.1080		
144 Pr	59	17.280 m	696.490	0.0148	0.0155	0.0114
			1489.150	0.0030		
			2185.700	0.0077		
144 Pm	61	363.000 d	301.700	0.0018	0.8781	0.6484
			476.780	0.4220		
			582.400	0.0019		
			618.010	0.9910		
			694.000	0.0055		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
144 Pm	61	363.000 d	696.490	1.0000	0.8781	0.6584
			778.570	0.0152		
			814.140	0.0055		
145 Ba	56	4.000 s	65.600	0.0589	0.1485	0.1226
			91.800	0.0740		
			96.900	0.1900		
			123.200	0.0114		
			161.800	0.0342		
			189.200	0.0170		
			247.500	0.0057		
			254.200	0.0170		
			286.000	0.0152		
			303.300	0.0342		
			325.500	0.0190		
			334.400	0.0095		
			343.700	0.0114		
			352.100	0.0095		
			378.800	0.0500		
			407.700	0.0076		
			417.500	0.0550		
			477.500	0.0190		
			533.000	0.0247		
			544.100	0.0475		
			571.400	0.0152		
			578.500	0.0190		
			598.500	0.0342		
			668.200	0.0038		
			683.800	0.0133		
			701.000	0.0057		
			730.600	0.0152		
			733.600	0.0057		
			843.500	0.0114		
			1110.400	0.0133		
145 La	57	24.200 s	64.300	0.0075	0.3197	0.2429
			70.000	0.1667		
			118.200	0.0358		
			126.300	0.0064		
			164.100	0.0268		
			169.800	0.0317		
			234.700	0.0057		
			238.000	0.0100		
			288.500	0.0015		
			291.400	0.0100		
			312.000	0.0015		
			327.400	0.0075		
			355.800	0.0377		
			360.500	0.0094		
			377.000	0.0128		
			387.900	0.0064		
			403.600	0.0094		
			430.200	0.0162		
			435.500	0.0166		
			447.400	0.0317		
			452.000	0.0053		
			464.100	0.0030		
			484.400	0.0072		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
145 La	57	24.200 s	505.200	0.0170	0.3197	0.2429
			515.400	0.0053		
			591.000	0.0053		
			606.100	0.0094		
			632.900	0.0143		
			644.800	0.0166		
			659.000	0.0038		
			664.000	0.0050		
			668.200	0.0030		
			671.800	0.0180		
			687.900	0.0075		
			730.600	0.0075		
			743.500	0.0143		
			764.100	0.0060		
			774.300	0.0060		
			786.500	0.0170		
			799.500	0.0064		
			840.700	0.0053		
			846.000	0.0023		
			883.000	0.0083		
			889.000	0.0098		
			895.300	0.0050		
			932.000	0.0279		
			959.900	0.0023		
			1021.500	0.0136		
			1030.900	0.0173		
			1036.900	0.0080		
			1050.800	0.0143		
			1222.100	0.0038		
			1238.000	0.0087		
			1596.500	0.0117		
			1819.000	0.0300		
			1922.400	0.0064		
			1946.100	0.0087		
			2087.800	0.0083		
			2155.200	0.0094		
			2204.700	0.0083		
			2289.000	0.0041		
			2295.900	0.0041		
			2306.800	0.0053		
			2351.400	0.0057		
			2359.400	0.0136		
			2377.100	0.0060		
			2475.700	0.0050		
			2479.200	0.0075		
			2526.800	0.0030		
			2542.600	0.0072		
145 Ce	58	2.980 m	62.700	0.1560	0.4273	0.3214
			125.500	0.0060		
			188.400	0.0120		
			207.400	0.0120		
			231.900	0.0240		
			284.000	0.0900		
			346.400	0.0060		
			350.600	0.0420		
			423.500	0.0420		
			435.500	0.0180		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
145 Ce	58	2.980 m	439.600	0.0660	0.4273	0.3214
			491.800	0.0120		
			498.200	0.0060		
			554.200	0.0060		
			655.400	0.0120		
			670.400	0.0120		
			723.600	0.6000		
			758.500	0.0060		
			782.400	0.0240		
			859.100	0.0180		
			911.000	0.0060		
			1110.000	0.0120		
			1118.500	0.0060		
			1147.600	0.0960		
			1210.400	0.0060		
145 Ce	58	3.000 m	63.000	0.1354	0.4670	0.3506
			233.000	0.0200		
			285.000	0.0883		
			300.000	0.0200		
			352.000	0.0560		
			423.000	0.0400		
			439.800	0.0916		
			492.000	0.0327		
			725.000	0.6540		
			863.000	0.0327		
			915.000	0.0458		
			1148.000	0.1112		
			1215.000	0.0200		
145 Pr	59	5.980 h	72.300	0.0020	0.0069	0.0050
			674.000	0.0043		
			748.000	0.0043		
			922.000	0.0010		
			979.000	0.0019		
			1052.000	0.0016		
			1152.000	0.0015		
145 Pm	61	17.712 y	67.200	0.0065	0.0010	0.0010
			72.400	0.0218		
145 Sm	62	340.000 d	61.250	0.1280	0.0043	0.0042
145 Eu	63	5.940 d	110.860	0.0153	0.7125	0.5222
			191.350	0.0054		
			252.700	0.0012		
			257.000	0.0012		
			338.000	0.0017		
			349.700	0.0010		
			365.300	0.0017		
			519.400	0.0010		
			526.200	0.0019		
			542.300	0.0409		
			653.640	0.1760		
			713.900	0.0024		
			753.200	0.0032		
			764.800	0.1610		
			838.700	0.0015		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
145 Eu	63	5.940 d	849.100	0.0018	0.7125	0.5222
			857.200	0.0085		
			864.400	0.0019		
			870.460	0.0010		
			881.300	0.0015		
			893.800	0.6400		
			1035.200	0.0026		
			1078.600	0.0040		
			1240.400	0.0011		
			1284.100	0.0060		
			1423.300	0.0043		
			1532.300	0.0038		
			1658.700	0.1540		
			1804.400	0.0111		
			1857.800	0.0037		
			1876.800	0.0118		
			1946.900	0.0018		
			1963.000	0.0018		
			1997.000	0.0660		
			2133.500	0.0020		
			2155.400	0.0011		
			2276.900	0.0011		
			2329.300	0.0020		
			2346.800	0.0022		
			2425.900	0.0013		
145 Gd m	64	1.417 m	329.500	0.0470	0.3578	0.2634
			386.600	0.0430		
			721.400	0.8265		
145 Gd	64	22.900 m	329.500	0.0291	0.8427	0.6228
			781.800	0.0030		
			808.600	0.0880		
			914.600	0.0020		
			949.600	0.0060		
			953.400	0.0119		
			1041.900	0.1040		
			1070.200	0.0090		
			1072.400	0.0170		
			1567.400	0.0090		
			1599.100	0.0177		
			1719.400	0.0110		
			1757.800	0.3370		
			1784.100	0.0070		
			1807.000	0.0020		
			1815.000	0.0090		
			1845.300	0.0050		
			1880.700	0.3520		
			2203.200	0.0020		
			2451.700	0.0030		
			2494.700	0.0130		
			2581.800	0.0030		
			2642.300	0.0210		
			2662.900	0.0030		
			2673.400	0.0020		
			2837.400	0.0090		
			2907.000	0.0010		
			2956.400	0.0010		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
145 Gd	64	22.900 m	3236.000	0.0010	0.8427	0.6228
			3259.600	0.0020		
			3285.600	0.0020		
			3294.100	0.0010		
			3369.800	0.0010		
			3602.800	0.0010		
			3623.800	0.0020		
146 Ce	58	14.200 m	52.000	0.0056	0.0951	0.0886
			87.000	0.0033		
			98.300	0.0215		
			100.900	0.0150		
			106.400	0.0033		
			133.600	0.0580		
			141.200	0.0260		
			210.300	0.0360		
			218.300	0.1180		
			250.900	0.0190		
			264.700	0.0570		
			316.800	0.3000		
			351.900	0.0015		
			369.100	0.0012		
			415.600	0.0076		
			467.900	0.0042		
			503.000	0.0067		
146 Pm	61	5.534 y	146.100	0.0021	0.4231	0.3187
			453.760	0.6300		
			589.000	0.0059		
			633.300	0.0212		
			736.200	0.2300		
			747.400	0.3590		
146 Eu	63	4.610 d	271.730	0.0096	1.2564	0.9211
			394.000	0.0047		
			397.640	0.0098		
			410.960	0.0100		
			430.460	0.0491		
			522.260	0.0500		
			622.100	0.0030		
			622.100	0.0030		
			633.190	0.4400		
			634.120	0.3800		
			664.680	0.0300		
			665.480	0.0700		
			702.310	0.0660		
			703.160	0.0870		
			704.710	0.0280		
			747.240	1.0000		
			790.700	0.0048		
			850.160	0.0200		
			879.400	0.0044		
			888.780	0.0166		
			900.100	0.0380		
			900.990	0.0960		
			914.170	0.0038		
			962.000	0.0015		
			965.900	0.0041		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
146 Eu	63	4.610 d	1058.700	0.0680	1.2564	0.9211
			1086.700	0.0030		
			1151.000	0.0222		
			1177.010	0.0211		
			1214.170	0.0022		
			1297.600	0.0575		
			1345.700	0.0013		
			1356.340	0.0037		
			1407.940	0.0259		
			1445.790	0.0037		
			1500.300	0.0012		
			1517.390	0.0033		
			1522.960	0.0128		
			1534.220	0.0627		
			1592.700	0.0053		
			1592.700	0.0032		
			1633.700	0.0043		
			1648.360	0.0081		
			1686.620	0.0052		
			1692.060	0.0041		
			1756.380	0.0089		
			1803.400	0.0016		
			1879.100	0.0018		
			1931.340	0.0128		
			2089.900	0.0199		
			2136.960	0.0017		
			2156.000	0.0055		
			2222.450	0.0014		
			2244.700	0.0019		
			2267.700	0.0051		
			2320.590	0.0011		
			2389.000	0.0025		
			2401.180	0.0028		
			2437.020	0.0103		
			2491.600	0.0026		
			2644.700	0.0015		
146 Gd	64	48.300 d	114.710	0.4440	0.0793	0.0836
			115.520	0.4500		
			154.640	0.4400		
			269.280	0.0010		
146 Tb	65	23.000 s	324.000	0.0070	1.2364	0.9126
			441.000	0.1170		
			655.000	0.0230		
			1078.900	0.4620		
			1417.400	0.1540		
			1579.500	0.8950		
			3139.600	0.1050		
147 Pr	59	13.600 m	49.900	0.0260	0.4504	0.3514
			78.000	0.1020		
			86.600	0.0500		
			100.200	0.0031		
			127.900	0.0880		
			140.620	0.0067		
			186.800	0.0140		
			190.470	0.0115		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
147 Pr	59	13.600 m	214.500	0.0130	0.4504	0.3514
			249.100	0.0151		
			264.600	0.0026		
			314.600	0.2400		
			328.900	0.0530		
			335.700	0.0650		
			388.800	0.0180		
			413.600	0.0101		
			454.650	0.0115		
			466.800	0.0160		
			477.800	0.0550		
			492.800	0.0070		
			499.860	0.0115		
			503.800	0.0070		
			516.750	0.0100		
			554.800	0.0790		
			577.900	0.1630		
			604.400	0.0067		
			609.010	0.0150		
			627.400	0.0031		
			631.400	0.0077		
			641.300	0.1900		
			699.700	0.0024		
			705.900	0.0050		
			719.100	0.0060		
			769.200	0.0043		
			794.000	0.0132		
			881.500	0.0031		
			887.100	0.0055		
			903.900	0.0101		
			934.300	0.0019		
			942.200	0.0101		
			949.400	0.0014		
			996.000	0.0160		
			1083.400	0.0096		
			1096.400	0.0022		
			1100.800	0.0046		
			1112.700	0.0012		
			1136.500	0.0160		
			1182.800	0.0122		
			1214.600	0.0053		
			1230.100	0.0024		
			1261.100	0.0530		
			1263.900	0.0070		
			1300.400	0.0300		
			1310.600	0.0060		
			1324.500	0.0100		
			1359.000	0.0019		
			1391.800	0.0011		
			1398.600	0.0012		
			1416.800	0.0031		
			1465.300	0.0014		
			1518.200	0.0017		
			1543.300	0.0030		
			1546.500	0.0029		
			1593.500	0.0029		
			1606.700	0.0012		
			1623.700	0.0031		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
147 Pr	59	13.600 m	1673.400	0.0026	0.4504	0.3514
			1793.200	0.0026		
			1995.200	0.0017		
			2315.000	0.0014		
			2335.400	0.0014		
147 Nd	60	10.980 d	91.106	0.2790	0.0663	0.0552
			120.480	0.0040		
			196.640	0.0020		
			275.374	0.0080		
			319.411	0.0195		
			398.155	0.0087		
			410.480	0.0014		
			439.895	0.0120		
			489.240	0.0015		
			531.016	0.1310		
			594.800	0.0026		
			685.900	0.0081		
147 Eu	63	24.000 d	76.150	0.0077	0.2431	0.1878
			121.250	0.2300		
			197.350	0.2600		
			472.000	0.0012		
			505.200	0.0018		
			550.000	0.0017		
			601.430	0.0680		
			677.600	0.1070		
			749.900	0.0024		
			798.810	0.0550		
			846.000	0.0010		
			857.070	0.0310		
			879.500	0.0019		
			933.110	0.0360		
			942.600	0.0021		
			955.940	0.0390		
			1064.000	0.0013		
			1077.160	0.0640		
			1119.900	0.0019		
			1180.100	0.0018		
			1197.100	0.0026		
			1255.910	0.0101		
			1318.000	0.0013		
			1332.100	0.0034		
			1349.600	0.0011		
			1427.200	0.0012		
			1448.700	0.0025		
147 Gd	64	1.587 d	111.170	0.0029	0.6931	0.5381
			166.340	0.0031		
			214.900	0.0025		
			216.900	0.0124		
			217.200	0.0050		
			229.320	0.6100		
			240.640	0.0148		
			249.150	0.0038		
			261.100	0.0190		
			291.700	0.0019		
			293.200	0.0010		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
147 Gd	64	1.587 d	297.400	0.0034	0.6931	0.5381
			309.960	0.0400		
			318.600	0.0210		
			341.800	0.0017		
			346.300	0.0205		
			370.000	0.1650		
			376.000	0.0018		
			396.000	0.3300		
			431.500	0.0015		
			460.600	0.0013		
			484.900	0.0290		
			511.000	0.0052		
			547.300	0.0029		
			559.070	0.0620		
			560.300	0.0030		
			573.000	0.0015		
			610.430	0.0153		
			619.000	0.0350		
			625.180	0.0450		
			632.350	0.0164		
			693.200	0.0025		
			701.300	0.0035		
			704.500	0.0066		
			714.570	0.0031		
			734.400	0.0016		
			750.800	0.0015		
			755.010	0.0199		
			765.810	0.1090		
			775.900	0.0106		
			776.330	0.0420		
			778.040	0.0480		
			782.600	0.0115		
			788.650	0.0078		
			804.540	0.0024		
			810.270	0.0050		
			820.530	0.0019		
			827.800	0.0050		
			834.700	0.0012		
			861.700	0.0168		
			879.100	0.0022		
			893.500	0.0780		
			896.500	0.0020		
			910.400	0.0054		
			929.010	0.1940		
			954.800	0.0018		
			968.400	0.0011		
			983.400	0.0016		
			988.600	0.0012		
			995.580	0.0057		
			995.580	0.0026		
			1006.400	0.0131		
			1017.900	0.0011		
			1040.400	0.0038		
			1044.200	0.0013		
			1061.200	0.0015		
			1069.350	0.0690		
			1122.900	0.0087		
			1125.500	0.0011		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
147 Gd	64	1.587 d	1130.900	0.0620	0.6931	0.5381
			1149.100	0.0037		
			1160.150	0.0064		
			1213.000	0.0012		
			1235.700	0.0111		
			1325.100	0.0083		
			1399.200	0.0016		
			1586.880	0.0054		
			1676.500	0.0025		
			1795.940	0.0077		
			1816.500	0.0014		
147 Tb m	65	1.830 m	997.600	0.0090	0.7223	0.5327
			1397.700	0.8500		
			1797.800	0.1400		
147 Tb	65	1.650 h	119.700	0.0440	0.6104	0.4530
			139.800	0.2000		
			347.400	0.0170		
			407.000	0.0140		
			434.800	0.0070		
			547.200	0.0200		
			554.700	0.0370		
			694.400	0.3100		
			1152.200	0.7300		
147 Dy	66	59.000 s	72.000	0.0550	0.1300	0.0955
			678.700	0.3300		
148 Pr	59	2.300 m	256.400	0.0450	0.6183	0.4908
			301.700	0.9100		
			450.300	0.1600		
			489.700	0.0550		
			522.500	0.0055		
			615.200	0.0150		
			660.600	0.0150		
			697.100	0.1220		
			782.000	0.0230		
			824.100	0.0160		
			868.800	0.0470		
			882.500	0.0055		
			903.200	0.0100		
			935.300	0.0109		
			945.700	0.0150		
			1023.200	0.0430		
			1079.800	0.0050		
			1106.200	0.0110		
			1132.500	0.0150		
			1157.200	0.0090		
			1170.600	0.0073		
			1209.100	0.0520		
			1247.700	0.0360		
			1247.700	0.0140		
			1342.700	0.0045		
			1356.900	0.0560		
			1380.700	0.0240		
			1427.500	0.0055		
			1520.500	0.0080		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
148 Pr	59	2.300 m	1532.100	0.0027	0.6183	0.4908
			1556.200	0.0220		
			1580.200	0.0045		
			1727.700	0.0027		
			1772.100	0.0045		
			1908.000	0.0100		
			1931.500	0.0055		
			2079.600	0.0140		
			2130.200	0.0150		
			2143.300	0.0036		
			2223.400	0.0036		
			2629.500	0.0100		
			2735.200	0.0045		
148 Pm	61	5.370 d	550.100	0.2330	0.3031	0.2239
			611.100	0.0112		
			914.900	0.1250		
			1465.100	0.2220		
148 Pm m	61	41.300 d	75.700	0.0100	1.1346	0.8483
			98.500	0.0383		
			189.500	0.0124		
			288.000	0.1240		
			311.700	0.0398		
			414.100	0.1860		
			432.700	0.0566		
			501.100	0.0690		
			550.100	0.9370		
			599.500	0.1240		
			611.100	0.0550		
			629.900	0.8920		
			725.600	0.3280		
			915.300	0.1900		
			1013.700	0.2040		
148 Eu	63	54.500 d	116.100	0.0010	1.1736	0.8731
			182.800	0.0011		
			189.600	0.0010		
			241.500	0.0104		
			243.700	0.0023		
			288.000	0.0022		
			310.000	0.0022		
			311.600	0.0150		
			377.500	0.0030		
			413.900	0.0960		
			413.900	0.0900		
			432.700	0.0280		
			437.000	0.0034		
			446.800	0.0013		
			468.500	0.0049		
			480.900	0.0016		
			495.000	0.0025		
			495.500	0.0024		
			501.300	0.0075		
			505.200	0.0028		
			516.700	0.0040		
			528.500	0.0019		
			550.290	0.9900		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
148 Eu	63	54.500 d	553.200	0.0340	1.1736	0.8731
			553.200	0.1370		
			571.900	0.0910		
			576.800	0.0021		
			590.100	0.0032		
			595.200	0.0020		
			599.500	0.0051		
			602.600	0.0023		
			611.260	0.1930		
			620.000	0.0100		
			629.900	0.7100		
			654.300	0.0200		
			657.000	0.0017		
			667.700	0.0013		
			669.900	0.0034		
			683.200	0.0128		
			714.800	0.0179		
			719.600	0.0011		
			725.700	0.1300		
			756.600	0.0019		
			770.400	0.0038		
			799.200	0.0034		
			870.000	0.0550		
			895.800	0.0055		
			903.900	0.0034		
			906.900	0.0015		
			915.300	0.0240		
			924.900	0.0027		
			930.500	0.0110		
			930.500	0.0130		
			938.200	0.0011		
			949.700	0.0021		
			964.200	0.0020		
			967.300	0.0290		
			980.000	0.0013		
			989.700	0.0039		
			1013.900	0.0050		
			1034.100	0.0790		
			1047.500	0.0020		
			1066.800	0.0029		
			1069.200	0.0022		
			1082.200	0.0017		
			1089.300	0.0020		
			1097.500	0.0010		
			1104.300	0.0045		
			1107.900	0.0010		
			1113.800	0.0013		
			1126.900	0.0010		
			1146.900	0.0190		
			1180.500	0.0030		
			1183.300	0.0170		
			1194.100	0.0013		
			1207.400	0.0059		
			1236.600	0.0039		
			1309.800	0.0046		
			1328.500	0.0122		
			1344.600	0.0178		
			1353.600	0.0047		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
148 Eu	63	54.500 d	1362.600	0.0055	1.1736	0.8731
			1409.000	0.0010		
			1454.300	0.0025		
			1460.500	0.0112		
			1503.000	0.0013		
			1521.900	0.0011		
			1543.100	0.0071		
			1560.700	0.0087		
			1621.500	0.0460		
			1635.300	0.0018		
			1650.400	0.0370		
			1677.800	0.0042		
			2173.200	0.0015		
148 Tb	65	2.200 m	129.500	0.0250	1.4807	1.1039
			142.700	0.0240		
			394.550	0.8600		
			481.650	0.0300		
			488.830	0.0520		
			631.870	0.9500		
			753.000	0.0170		
			784.480	1.0000		
			808.100	0.0290		
			882.410	0.9200		
148 Dy	66	3.100 m	620.240	0.9970	0.3554	0.2614
149 Pr	59	2.300 m	110.000	0.1670	0.0558	0.0493
			139.000	0.1260		
			165.000	0.1300		
			578.000	0.0530		
			742.000	0.0264		
149 Nd	60	1.730 h	58.883	0.0152	0.1975	0.1705
			74.330	0.0126		
			74.660	0.0100		
			75.740	0.0033		
			97.007	0.0153		
			114.321	0.1880		
			116.930	0.0012		
			122.416	0.0023		
			126.630	0.0012		
			139.210	0.0048		
			155.876	0.0610		
			177.831	0.0016		
			188.640	0.0199		
			192.027	0.0060		
			198.928	0.0146		
			208.148	0.0290		
			211.307	0.2730		
			213.946	0.0041		
			226.846	0.0016		
			240.218	0.0400		
			245.699	0.0104		
			258.064	0.0038		
			267.692	0.0610		
			270.165	0.1070		
			273.250	0.0023		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
149 Nd	60	1.730 h	275.445	0.0060	0.1975	0.1705
			276.960	0.0032		
			282.455	0.0062		
			288.192	0.0068		
			294.807	0.0058		
			301.133	0.0038		
			310.982	0.0052		
			326.556	0.0470		
			347.833	0.0019		
			349.233	0.0148		
			360.055	0.0016		
			366.637	0.0066		
			384.691	0.0034		
			423.554	0.0940		
			443.550	0.0150		
			538.150	0.0011		
			540.510	0.0770		
			556.430	0.0120		
			630.238	0.0022		
			635.482	0.0011		
			654.831	0.0730		
			686.933	0.0010		
			696.266	0.0017		
			808.834	0.0017		
			923.876	0.0012		
			979.020	0.0011		
			1022.780	0.0012		
			1234.120	0.0029		
149 Pm	61	2.212 d	285.900	0.0280	0.0045	0.0042
149 Eu	63	93.100 d	254.500	0.0059	0.0170	0.0152
			277.000	0.0330		
			327.500	0.0390		
			350.000	0.0034		
			505.900	0.0055		
			528.500	0.0053		
149 Gd	64	9.400 d	149.600	0.4190	0.2044	0.1743
			214.500	0.0015		
			230.400	0.0012		
			252.300	0.0019		
			260.500	0.0104		
			272.000	0.0263		
			298.500	0.2270		
			346.500	0.1800		
			405.500	0.0070		
			459.900	0.0043		
			478.700	0.0017		
			496.400	0.0130		
			516.400	0.0200		
			534.200	0.0238		
			553.100	0.0010		
			645.200	0.0106		
			663.300	0.0070		
			666.200	0.0070		
			726.500	0.0010		
			748.200	0.0620		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
149 Gd	64	9.400 d	788.600	0.0530	0.2044	0.1743
			875.800	0.0016		
			933.300	0.0040		
			939.100	0.0160		
			947.700	0.0067		
149 Tb	65	4.150 h	98.430	0.0016	0.5097	0.3925
			164.800	0.2230		
			187.200	0.0360		
			352.300	0.2640		
			388.400	0.1630		
			464.450	0.0510		
			652.000	0.1340		
			674.400	0.0045		
			687.400	0.0032		
			723.500	0.0013		
			740.100	0.0032		
			772.500	0.0129		
			816.800	0.0990		
			835.300	0.0029		
			853.300	0.1300		
			861.700	0.0670		
			955.700	0.0033		
			965.800	0.0038		
			978.400	0.0036		
			996.700	0.0011		
			1002.300	0.0020		
			1033.800	0.0027		
			1040.000	0.0114		
			1054.500	0.0015		
			1118.100	0.0016		
			1132.300	0.0064		
			1136.200	0.0100		
			1144.900	0.0027		
			1167.200	0.0040		
			1175.800	0.0296		
			1191.700	0.0027		
			1204.700	0.0027		
			1260.900	0.0014		
			1302.900	0.0063		
			1341.400	0.0186		
			1379.600	0.0032		
			1403.000	0.0024		
			1449.500	0.0075		
			1483.800	0.0021		
			1491.400	0.0024		
			1513.900	0.0014		
			1540.100	0.0025		
			1545.500	0.0010		
			1559.400	0.0010		
			1585.600	0.0016		
			1640.300	0.0258		
			1679.200	0.0017		
			1798.600	0.0018		
			1806.200	0.0041		
			1827.500	0.0096		
			1874.400	0.0035		
			1909.600	0.0020		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
149 Tb	65	4.150 h	1940.300	0.0055	0.5097	0.3925
			1948.500	0.0055		
			1973.600	0.0011		
			2008.500	0.0063		
			2035.300	0.0013		
			2107.700	0.0014		
			2134.100	0.0022		
			2183.400	0.0056		
			2260.800	0.0012		
			2284.200	0.0042		
			2451.900	0.0021		
			2561.700	0.0023		
			2647.400	0.0015		
			2755.300	0.0013		
			2774.500	0.0012		
			2857.100	0.0012		
			2963.900	0.0071		
			3202.200	0.0018		
			3273.100	0.0013		
150 Pm	61	2.680 h	251.600	0.0018	0.7564	0.5810
			297.900	0.0012		
			305.700	0.0011		
			333.920	0.6900		
			345.930	0.0044		
			406.510	0.0570		
			420.100	0.0011		
			425.330	0.0049		
			439.380	0.0078		
			453.480	0.0014		
			492.560	0.0034		
			565.700	0.0133		
			587.020	0.0136		
			612.250	0.0095		
			620.800	0.0012		
			652.840	0.0034		
			667.300	0.0016		
			712.220	0.0450		
			731.060	0.0028		
			737.500	0.0228		
			761.300	0.0011		
			831.850	0.1210		
			842.550	0.0041		
			859.950	0.0340		
			876.410	0.0740		
			889.200	0.0014		
			904.460	0.0092		
			917.440	0.0048		
			921.610	0.0086		
			1004.440	0.0081		
			1024.130	0.0075		
			1046.120	0.0036		
			1066.000	0.0046		
			1083.330	0.0018		
			1154.640	0.0069		
			1165.770	0.1610		
			1170.900	0.0108		
			1179.600	0.0010		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
150 Pm	61	2.680 h	1193.870	0.0490	0.7564	0.5810
			1213.720	0.0105		
			1223.280	0.0290		
			1324.510	0.1770		
			1379.320	0.0320		
			1436.600	0.0027		
			1452.900	0.0013		
			1519.530	0.0027		
			1629.790	0.0081		
			1647.200	0.0026		
			1713.310	0.0036		
			1726.900	0.0019		
			1736.400	0.0700		
			1766.700	0.0019		
			1926.040	0.0034		
			1963.710	0.0149		
			2033.460	0.0098		
			2216.500	0.0024		
			2478.600	0.0038		
			2529.200	0.0034		
			2550.500	0.0012		
			2893.100	0.0021		
150 Eu m	63	12.620 h	333.900	0.0380	0.0197	0.0164
			406.500	0.0270		
			712.200	0.0013		
			831.800	0.0019		
			921.700	0.0020		
			1165.700	0.0025		
			1223.000	0.0019		
			1963.000	0.0011		
150 Eu	63	34.223 y	251.590	0.0017	0.8126	0.6455
			284.990	0.0016		
			298.050	0.0063		
			333.960	0.9400		
			342.550	0.0017		
			345.950	0.0039		
			372.720	0.0023		
			381.980	0.0011		
			402.140	0.0076		
			404.000	0.0024		
			406.510	0.0014		
			439.390	0.7900		
			448.780	0.0025		
			461.750	0.0081		
			464.350	0.0035		
			464.350	0.0016		
			474.490	0.0014		
			485.920	0.0016		
			505.510	0.0471		
			510.070	0.0012		
			515.780	0.0097		
			520.070	0.0046		
			542.960	0.0013		
			571.250	0.0040		
			584.260	0.5150		
			607.310	0.0016		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
150 Eu	63	34.223 y	625.550	0.0030	0.8126	0.6455
			667.030	0.0023		
			675.840	0.0050		
			712.190	0.0106		
			731.200	0.0033		
			737.440	0.0940		
			741.450	0.0084		
			748.040	0.0505		
			749.780	0.0066		
			751.050	0.0210		
			756.490	0.0011		
			773.260	0.0059		
			828.540	0.0057		
			830.800	0.0052		
			836.560	0.0030		
			859.850	0.0057		
			869.230	0.0181		
			899.050	0.0092		
			923.240	0.0030		
			1049.020	0.0524		
			1070.980	0.0014		
			1083.310	0.0016		
			1122.830	0.0032		
			1170.560	0.0131		
			1193.810	0.0078		
			1197.080	0.0111		
			1246.940	0.0187		
			1251.220	0.0016		
			1261.950	0.0045		
			1308.640	0.0087		
			1321.880	0.0017		
			1334.030	0.0041		
			1343.740	0.0254		
			1350.260	0.0017		
			1485.450	0.0180		
			1636.490	0.0070		
			1783.150	0.0010		
150 Tb m	65	5.960 m	95.500	0.0050	1.3417	1.0117
			154.100	0.0100		
			162.000	0.0730		
			179.400	0.0140		
			180.900	0.0140		
			275.000	0.0190		
			343.070	0.2500		
			412.400	0.0980		
			415.300	0.0400		
			438.370	0.4200		
			455.700	0.1200		
			496.300	0.2350		
			510.000	0.2600		
			566.520	0.2200		
			638.050	1.0000		
			648.400	0.1600		
			650.400	0.7000		
			789.900	0.0230		
			827.480	0.4100		
150 Tb	65	3.270 h	412.000	0.0094	0.6574	0.4849

uclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
50 Tb	65	3.270 h	437.100	0.0094	0.6574	0.4849
			496.200	0.1510		
			525.200	0.0068		
			557.500	0.0029		
			565.900	0.0115		
			569.200	0.0250		
			574.200	0.0036		
			638.200	0.7200		
			650.400	0.0410		
			701.000	0.0032		
			748.200	0.0060		
			779.300	0.0054		
			792.300	0.0470		
			813.200	0.0072		
			820.900	0.0144		
			880.300	0.0320		
			884.300	0.0022		
			949.900	0.0108		
			954.500	0.0122		
			1045.400	0.0122		
			1075.100	0.0060		
			1175.500	0.0050		
			1275.600	0.0043		
			1291.500	0.0166		
			1316.800	0.0050		
			1349.700	0.0130		
			1387.400	0.0036		
			1414.600	0.0029		
			1430.400	0.0240		
			1444.800	0.0097		
			1453.500	0.0370		
			1518.200	0.0290		
			1525.700	0.0048		
			1541.900	0.0043		
			1592.700	0.0180		
			1726.800	0.0022		
			1771.400	0.0058		
			1787.800	0.0180		
			1900.600	0.0086		
			2037.000	0.0079		
			2092.000	0.0151		
			2179.600	0.0043		
			2206.500	0.0115		
			2318.000	0.0038		
			2364.100	0.0115		
			2395.500	0.0061		
			2409.000	0.0037		
			2425.100	0.0101		
			2844.000	0.0035		
			3035.000	0.0036		
150 Dy	66	7.170 m	396.750	0.6700	0.1523	0.1284
151 Nd	60	12.440 m	31.400	0.0410	0.4686	0.3643
			58.500	0.0050		
			69.200	0.0125		
			85.300	0.0270		
			89.900	0.0180		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
151 Nd	60	12.440 m	103.000	0.0046	0.4686	0.3643
			112.000	0.0046		
			116.700	0.4700		
			138.800	0.0780		
			149.400	0.0032		
			170.000	0.0070		
			171.000	0.0410		
			175.000	0.0760		
			183.100	0.0052		
			197.200	0.0034		
			199.400	0.0035		
			207.700	0.0014		
			239.000	0.0063		
			239.000	0.0037		
			248.800	0.0028		
			255.600	0.1680		
			263.500	0.0080		
			268.500	0.0014		
			275.200	0.0018		
			300.600	0.0200		
			312.400	0.0029		
			320.200	0.0090		
			324.400	0.0058		
			332.800	0.0058		
			332.800	0.0018		
			347.100	0.0043		
			357.000	0.0041		
			363.400	0.0011		
			365.700	0.0020		
			373.700	0.0014		
			402.200	0.0200		
			407.700	0.0046		
			414.500	0.0023		
			423.500	0.0730		
			427.200	0.0055		
			439.300	0.0038		
			446.900	0.0031		
			460.600	0.0110		
			487.400	0.0024		
			491.400	0.0023		
			516.400	0.0014		
			524.200	0.0060		
			531.800	0.0017		
			542.000	0.0058		
			550.000	0.0067		
			562.600	0.0024		
			577.400	0.0044		
			585.500	0.0158		
			589.700	0.0031		
			596.800	0.0080		
			612.400	0.0011		
			618.800	0.0032		
			629.800	0.0017		
			658.500	0.0084		
			670.500	0.0029		
			677.900	0.0260		
			724.100	0.0028		
			736.400	0.0720		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
151 Nd	60	12.440 m	739.400	0.0150	0.4686	0.3643
			755.500	0.0144		
			760.000	0.0017		
			765.100	0.0023		
			768.000	0.0037		
			774.000	0.0034		
			790.400	0.0013		
			797.500	0.0550		
			809.600	0.0024		
			812.800	0.0018		
			820.000	0.0012		
			829.100	0.0026		
			841.100	0.0106		
			852.800	0.0047		
			869.100	0.0026		
			871.800	0.0021		
			876.100	0.0049		
			878.300	0.0014		
			879.700	0.0040		
			881.000	0.0011		
			899.600	0.0014		
			901.600	0.0017		
			904.700	0.0028		
			910.900	0.0021		
			914.100	0.0121		
			925.400	0.0015		
			933.400	0.0011		
			935.400	0.0011		
			943.300	0.0040		
			958.300	0.0057		
			968.000	0.0017		
			995.100	0.0012		
			1003.100	0.0012		
			1016.400	0.0290		
			1032.300	0.0012		
			1035.900	0.0024		
			1041.700	0.0049		
			1048.100	0.0081		
			1066.300	0.0018		
			1070.000	0.0014		
			1072.700	0.0018		
			1080.600	0.0037		
			1107.100	0.0047		
			1122.100	0.0460		
			1126.500	0.0021		
			1133.200	0.0017		
			1145.200	0.0023		
			1156.600	0.0023		
			1169.300	0.0029		
			1173.000	0.0011		
			1180.600	0.1530		
			1188.800	0.0024		
			1200.800	0.0024		
			1232.700	0.0011		
			1270.900	0.0017		
			1286.100	0.0031		
			1293.900	0.0020		
			1297.300	0.0024		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
151 Nd	60	12.440 m	1314.500	0.0037	0.4686	0.3643
			1316.600	0.0012		
			1328.400	0.0038		
			1333.300	0.0020		
			1341.000	0.0017		
			1359.700	0.0014		
			1362.700	0.0037		
			1379.200	0.0020		
			1383.100	0.0011		
			1460.800	0.0011		
			1475.100	0.0011		
			1485.000	0.0031		
			1549.300	0.0037		
			1577.700	0.0017		
			1597.100	0.0011		
			1617.500	0.0038		
			1636.200	0.0011		
			1716.400	0.0014		
			1775.600	0.0028		
			1892.700	0.0021		
151 Pm	61	1.183 d	62.920	0.0021	0.1592	0.1365
			64.880	0.0190		
			65.830	0.0114		
			69.690	0.0049		
			76.210	0.0021		
			98.040	0.0036		
			100.000	0.0250		
			101.910	0.0129		
			104.820	0.0350		
			139.280	0.0047		
			143.160	0.0021		
			147.510	0.0016		
			156.180	0.0015		
			162.920	0.0084		
			163.560	0.0150		
			167.730	0.0780		
			168.380	0.0083		
			176.500	0.0085		
			177.150	0.0360		
			186.570	0.0017		
			201.950	0.0085		
			204.190	0.0013		
			209.000	0.0164		
			227.150	0.0031		
			232.420	0.0103		
			236.600	0.0016		
			236.700	0.0019		
			237.100	0.0052		
			240.080	0.0360		
			254.220	0.0016		
			258.090	0.0054		
			275.200	0.0660		
			280.080	0.0024		
			290.720	0.0080		
			306.740	0.0024		
			323.920	0.0122		
			325.800	0.0011		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
151 Pm	61	1.183 d	329.720	0.0023	0.1592	0.1365
			340.080	0.2200		
			344.890	0.0210		
			349.770	0.0013		
			353.320	0.0011		
			379.780	0.0094		
			406.970	0.0019		
			440.820	0.0150		
			445.650	0.0400		
			451.330	0.0028		
			490.210	0.0013		
			516.150	0.0019		
			564.930	0.0035		
			574.970	0.0012		
			636.080	0.0138		
			654.160	0.0024		
			668.700	0.0035		
			669.200	0.0028		
			671.190	0.0087		
			704.090	0.0032		
			709.120	0.0013		
			717.600	0.0400		
			736.010	0.0046		
			752.670	0.0123		
			772.640	0.0083		
			784.950	0.0020		
			807.840	0.0048		
			817.650	0.0017		
			848.630	0.0027		
			948.640	0.0032		
151 Gd	64	120.000 d	153.570	0.0510	0.0138	0.0131
			174.650	0.0240		
			239.000	0.0012		
			243.220	0.0460		
			307.430	0.0084		
			353.510	0.0010		
151 Tb	65	17.600 h	108.260	0.2500	0.4490	0.3608
			149.100	0.0047		
			160.900	0.0042		
			180.410	0.1140		
			192.090	0.0380		
			251.730	0.2600		
			263.600	0.0016		
			287.040	0.2500		
			318.300	0.0023		
			380.400	0.0430		
			385.400	0.0114		
			395.300	0.0960		
			416.400	0.0140		
			426.500	0.0410		
			443.700	0.1040		
			467.400	0.0104		
			479.000	0.1600		
			499.700	0.0039		
			512.000	0.0034		
			536.700	0.0047		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
151 Tb	65	17.600 h	587.270	0.1700	0.4490	0.3608
			604.810	0.0320		
			616.600	0.1040		
			656.700	0.0052		
			661.000	0.0049		
			692.260	0.0150		
			703.750	0.0380		
			731.140	0.0910		
			762.800	0.0034		
			805.600	0.0062		
			884.600	0.0014		
			905.710	0.0101		
			913.400	0.0013		
			938.800	0.0013		
			979.600	0.0026		
			983.300	0.0011		
			1009.900	0.0013		
			1025.200	0.0014		
			1050.600	0.0016		
			1061.800	0.0018		
			1110.190	0.0070		
			1157.900	0.0017		
			1171.180	0.0057		
			1182.200	0.0019		
			1191.400	0.0016		
			1195.400	0.0016		
			1222.300	0.0047		
			1280.600	0.0013		
			1312.370	0.0057		
			1348.800	0.0016		
			1352.200	0.0018		
			1384.000	0.0032		
			1448.800	0.0011		
			1483.600	0.0041		
			1495.400	0.0019		
			1599.700	0.0019		
			1670.700	0.0060		
			1815.800	0.0010		
152 Eu m	63	9.320 h	121.777	0.0720	0.1524	0.1132
			344.273	0.0240		
			562.920	0.0023		
			841.630	0.1460		
			961.060	0.0020		
			963.340	0.1200		
			970.380	0.0060		
			1314.670	0.0096		
152 Eu	63	13.339 y	121.782	0.2838	0.5983	0.4556
			244.699	0.0751		
			295.939	0.0043		
			329.433	0.0012		
			344.275	0.2658		
			367.788	0.0086		
			411.115	0.0223		
			416.052	0.0011		
			443.983	0.0032		
			444.000	0.0280		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
152 Eu	63	13.339 y	488.660	0.0041	0.5983	0.4556
			503.387	0.0015		
			564.021	0.0047		
			566.421	0.0013		
			586.294	0.0046		
			656.484	0.0014		
			674.678	0.0019		
			678.623	0.0047		
			688.678	0.0085		
			719.353	0.0027		
			764.905	0.0017		
			778.910	0.1296		
			810.459	0.0032		
			841.586	0.0016		
			867.388	0.0421		
			919.401	0.0044		
			926.324	0.0026		
			964.130	0.0013		
			964.131	0.1449		
			1005.279	0.0065		
			1084.000	0.0024		
			1085.914	0.1016		
			1089.700	0.0166		
			1109.180	0.0018		
			1112.116	0.1356		
			1212.950	0.0140		
			1249.946	0.0018		
			1292.784	0.0010		
			1299.124	0.0163		
			1408.011	0.2085		
			1457.628	0.0049		
			1528.115	0.0026		
153 Pm	61	5.400 m	35.842	0.2500	0.0363	0.0285
			83.339	0.0110		
			90.874	0.0170		
			91.455	0.0900		
			92.000	0.0040		
			119.763	0.0600		
			127.300	0.1400		
			129.360	0.0180		
			147.000	0.0050		
			175.370	0.0200		
			182.900	0.0270		
153 Sm	62	0.011 s	32.900	1.0000	0.1047	0.0469
			46.000	0.5500		
			53.600	0.2250		
			58.000	0.2250		
153 Sm	62	1.946 d	69.672	0.0525	0.0151	0.0165
			75.421	0.0019		
			83.367	0.0021		
			89.484	0.0017		
			97.430	0.0073		
			103.179	0.2830		
153 Gd	64	7.680E-05 s	41.600	0.0839	0.0361	0.0365

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
153 Gd	64	7.680E-05 s	51.800	0.0615	0.0361	0.0365
			76.000	0.8170		
			77.800	0.0225		
			93.400	0.0100		
			128.000	0.0060		
153 Gd	64	242.000 d	69.672	0.0242	0.0231	0.0253
			83.367	0.0021		
			97.430	0.2950		
			103.179	0.2110		
153 Tb	65	2.340 d	41.600	0.0368	0.1020	0.0908
			46.500	0.0090		
			51.800	0.0067		
			68.200	0.0040		
			82.800	0.0850		
			87.600	0.0580		
			88.400	0.0200		
			91.500	0.0018		
			102.300	0.0740		
			109.800	0.0700		
			129.200	0.0120		
			139.800	0.0030		
			141.700	0.0120		
			170.600	0.0730		
			174.400	0.0090		
			183.500	0.0082		
			185.900	0.0018		
			193.600	0.0015		
			208.000	0.0064		
			210.000	0.0080		
			212.200	0.3150		
			249.700	0.0250		
			258.800	0.0010		
			262.000	0.0048		
			275.000	0.0024		
			303.400	0.0085		
			315.000	0.0097		
			320.000	0.0024		
			327.000	0.0018		
			354.800	0.0015		
			361.500	0.0012		
			448.200	0.0012		
			455.300	0.0039		
			507.000	0.0048		
			511.000	0.0117		
			548.800	0.0018		
			836.000	0.0088		
			852.500	0.0015		
			904.400	0.0100		
			918.900	0.0015		
			946.000	0.0097		
			992.500	0.0112		
			1102.000	0.0039		
154 Pm	61	1.700 m	81.980	0.1300	0.9356	0.6902
			184.760	0.0480		
			414.800	0.0114		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
154 Pm	61	1.700 m	664.600	0.0140	0.9356	0.6902
			700.400	0.0048		
			754.300	0.0470		
			839.600	0.1290		
			891.500	0.0690		
			911.100	0.0470		
			921.600	0.0860		
			962.500	0.0370		
			970.000	0.0520		
			1017.600	0.1030		
			1033.000	0.0100		
			1096.200	0.0580		
			1118.900	0.0040		
			1148.100	0.0940		
			1162.700	0.0080		
			1177.800	0.0370		
			1297.600	0.0043		
			1358.600	0.0025		
			1394.000	0.1300		
			1440.300	0.0021		
			1808.800	0.0160		
			1891.000	0.0140		
			1894.500	0.0050		
			1988.000	0.0130		
			2058.900	0.1900		
			2070.200	0.0190		
			2140.900	0.1100		
			2213.600	0.0056		
			2347.700	0.0180		
			2370.100	0.0064		
			2510.600	0.0140		
			2535.900	0.0064		
			2592.000	0.0043		
			2618.800	0.0039		
			2778.900	0.0031		
154 Pm m	61	2.700 m	81.980	0.1900	0.9964	0.7553
			184.760	0.3900		
			231.100	0.1320		
			277.400	0.0098		
			280.200	0.1330		
			358.900	0.0390		
			364.400	0.0150		
			375.200	0.0160		
			438.700	0.0350		
			526.100	0.0130		
			546.700	0.1330		
			635.900	0.0060		
			659.000	0.0070		
			664.600	0.0052		
			693.700	0.0110		
			700.400	0.0017		
			742.800	0.0370		
			745.300	0.0410		
			834.200	0.0460		
			839.600	0.0270		
			911.100	0.0044		
			914.500	0.0200		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
154 Pm m	61	2.700 m	921.600	0.0180	0.9964	0.7553
			930.500	0.0640		
			954.200	0.0180		
			962.500	0.0140		
			1096.200	0.0057		
			1116.400	0.0070		
			1173.700	0.0070		
			1177.800	0.0034		
			1204.700	0.0210		
			1273.700	0.0220		
			1287.500	0.0049		
			1317.900	0.0130		
			1358.600	0.1140		
			1394.000	0.0052		
			1394.000	0.0390		
			1433.600	0.0160		
			1440.300	0.0980		
			1440.300	0.1500		
			1457.700	0.0420		
			1549.400	0.0340		
			1551.300	0.0210		
			1612.400	0.0110		
			1625.600	0.0480		
			1656.100	0.0480		
			1719.900	0.0049		
			1733.900	0.0260		
			1797.600	0.0260		
			1840.900	0.0380		
			2058.900	0.0710		
			2140.900	0.0400		
154 Eu m	63	46.000 m	31.780	0.0570	0.0356	0.0291
			35.800	0.0085		
			35.818	0.1300		
			68.170	0.3700		
			100.880	0.2500		
			136.800	0.0011		
154 Eu	63	8.806 y	123.070	0.4050	0.6568	0.4899
			188.246	0.0023		
			247.939	0.0660		
			401.300	0.0021		
			444.440	0.0050		
			478.260	0.0022		
			557.560	0.0026		
			582.000	0.0084		
			591.810	0.0480		
			625.220	0.0031		
			676.590	0.0014		
			692.410	0.0169		
			715.760	0.0017		
			723.300	0.1970		
			756.870	0.0430		
			815.550	0.0046		
			845.390	0.0055		
			850.640	0.0023		
			873.190	0.1150		
			892.730	0.0046		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
154 Eu	63	8.806 y	904.050	0.0082	0.6568	0.4899
			996.320	0.1030		
			1004.760	0.1790		
			1047.400	0.0014		
			1118.500	0.0010		
			1128.400	0.0027		
			1140.900	0.0022		
			1241.600	0.0013		
			1246.200	0.0090		
			1274.450	0.3550		
			1494.400	0.0065		
			1593.000	0.0103		
			1596.530	0.0183		
154 Tb m2	65	9.000 h	123.040	0.3600	0.7873	0.5935
			124.400	0.0028		
			232.030	0.0056		
			247.910	0.2700		
			329.900	0.0023		
			337.900	0.0033		
			346.740	0.0190		
			382.100	0.0124		
			415.820	0.0250		
			444.500	0.0127		
			461.400	0.0030		
			484.900	0.0019		
			492.200	0.0016		
			506.400	0.0073		
			512.000	0.0028		
			516.000	0.0730		
			540.120	0.2300		
			545.500	0.0012		
			557.560	0.0038		
			591.900	0.0014		
			598.200	0.0170		
			625.200	0.0028		
			642.300	0.0082		
			649.470	0.1320		
			660.300	0.0014		
			669.300	0.0014		
			676.530	0.0390		
			692.370	0.0400		
			715.760	0.0014		
			722.500	0.0045		
			723.600	0.0028		
			753.100	0.0028		
			756.700	0.0320		
			796.400	0.0030		
			800.700	0.0012		
			815.550	0.0113		
			826.400	0.0016		
			830.400	0.0082		
			845.600	0.0030		
			850.600	0.0019		
			857.300	0.0012		
			873.190	0.0100		
			880.600	0.0038		
			892.710	0.0380		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
154 Tb m2	65	9.000 h	922.100	0.0047	0.7873	0.5935
			924.470	0.0170		
			928.200	0.0042		
			953.100	0.0068		
			965.100	0.0040		
			981.400	0.0038		
			984.300	0.0054		
			996.330	0.1030		
			1004.720	0.1300		
			1012.900	0.0012		
			1021.000	0.0035		
			1033.300	0.0056		
			1041.900	0.0026		
			1047.000	0.0016		
			1053.900	0.0026		
			1058.100	0.0033		
			1061.200	0.0016		
			1072.000	0.0042		
			1084.300	0.0045		
			1101.900	0.0033		
			1118.100	0.0028		
			1128.700	0.0190		
			1140.700	0.0170		
			1149.100	0.0117		
			1152.100	0.0260		
			1177.700	0.0035		
			1188.600	0.0070		
			1208.100	0.0061		
			1214.100	0.0013		
			1229.200	0.0070		
			1234.000	0.0014		
			1237.500	0.0019		
			1241.300	0.0033		
			1246.200	0.0033		
			1258.100	0.0190		
			1274.420	0.0094		
			1274.700	0.0038		
			1280.400	0.0021		
			1288.400	0.0170		
			1308.900	0.0014		
			1339.800	0.0035		
			1387.600	0.0035		
			1419.400	0.0087		
			1451.000	0.0016		
			1490.600	0.0124		
			1494.200	0.0033		
			1515.900	0.0038		
			1520.500	0.0068		
			1522.800	0.0040		
			1553.000	0.0028		
			1619.200	0.0047		
			1652.000	0.0014		
			1721.000	0.0016		
			1815.200	0.0016		
			1858.800	0.0026		
			1894.700	0.0020		
			1905.700	0.0019		
			1931.000	0.0014		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
154 Tb m2	65	9.000 h	1934.700	0.0087	0.7873	0.5935
			1964.970	0.0230		
			1997.600	0.0045		
			2025.000	0.0023		
			2054.200	0.0011		
			2084.900	0.0015		
			2106.800	0.0019		
			2142.900	0.0026		
			2153.810	0.0120		
			2182.600	0.0021		
			2212.920	0.0099		
			2245.700	0.0054		
			2283.500	0.0026		
			2295.900	0.0038		
			2324.500	0.0014		
			2358.300	0.0023		
			2372.400	0.0016		
			2389.500	0.0023		
			2411.100	0.0012		
			2496.300	0.0012		
			2559.600	0.0017		
			2575.100	0.0013		
154 Tb	65	21.400 h	123.040	0.2800	1.0837	0.8036
			247.910	0.0180		
			429.600	0.0057		
			444.500	0.0102		
			470.300	0.0043		
			489.000	0.0024		
			511.000	0.0230		
			512.000	0.0012		
			536.500	0.0141		
			557.560	0.0580		
			582.000	0.0027		
			587.800	0.0048		
			602.800	0.0027		
			625.200	0.0017		
			676.530	0.0019		
			692.370	0.0340		
			701.200	0.0052		
			705.100	0.0510		
			715.760	0.0087		
			722.100	0.0820		
			756.700	0.0035		
			789.500	0.0028		
			815.600	0.0093		
			850.600	0.0087		
			864.600	0.0019		
			873.190	0.0560		
			878.300	0.0300		
			945.800	0.0044		
			956.900	0.0024		
			996.330	0.0520		
			1004.720	0.0085		
			1016.000	0.0044		
			1033.300	0.0047		
			1047.000	0.0099		
			1053.900	0.0014		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
154 Tb	65	21.400 h	1059.000	0.0089	1.0837	0.8036
			1118.100	0.0250		
			1123.200	0.0610		
			1128.700	0.0019		
			1160.100	0.0030		
			1175.000	0.0025		
			1188.500	0.0030		
			1191.200	0.0100		
			1218.600	0.0017		
			1241.300	0.0300		
			1274.420	0.1120		
			1291.300	0.0740		
			1308.900	0.0024		
			1325.100	0.0125		
			1370.200	0.0015		
			1374.200	0.0055		
			1391.200	0.0053		
			1405.000	0.0030		
			1408.500	0.0030		
			1414.600	0.0210		
			1438.500	0.0014		
			1458.400	0.0166		
			1481.200	0.0024		
			1506.400	0.0030		
			1527.200	0.0021		
			1593.700	0.0065		
			1607.000	0.0014		
			1737.600	0.0069		
			1774.900	0.0030		
			1841.000	0.0011		
			1906.100	0.0141		
			1909.100	0.0141		
			1974.000	0.0022		
			1974.600	0.0015		
			1996.600	0.0800		
			2041.900	0.0209		
			2064.110	0.0760		
			2108.000	0.0037		
			2119.680	0.0450		
			2187.190	0.1060		
			2219.500	0.0087		
			2278.500	0.0033		
			2307.490	0.0155		
			2342.500	0.0159		
			2345.300	0.0159		
			2363.300	0.0043		
			2377.000	0.0033		
			2380.100	0.0033		
			2402.500	0.0026		
			2430.500	0.0230		
			2467.000	0.0053		
			2467.850	0.0084		
			2486.240	0.0141		
			2499.800	0.0030		
			2503.400	0.0024		
			2525.100	0.0019		
			2532.300	0.0014		
			2599.600	0.0027		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
154 Tb	65	21.400 h	2611.300	0.0011	1.0837	0.8036
			2646.300	0.0041		
			2655.800	0.0026		
			2666.000	0.0044		
			2711.700	0.0012		
			2722.800	0.0013		
			2789.100	0.0074		
			2826.400	0.0062		
			2867.100	0.0031		
			2900.000	0.0100		
			2934.200	0.0022		
			2949.500	0.0050		
			2989.900	0.0050		
			3009.600	0.0037		
			3023.200	0.0084		
			3032.400	0.0015		
			3062.500	0.0017		
			3090.500	0.0011		
			3141.000	0.0011		
154 Tb m1	65	22.600 h	123.040	0.4700	1.1736	0.9314
			124.400	0.0168		
			141.320	0.0780		
			171.990	0.0490		
			225.940	0.2900		
			232.030	0.0026		
			247.910	0.8500		
			265.830	0.0420		
			267.500	0.0420		
			304.800	0.0151		
			304.800	0.0112		
			318.300	0.0017		
			329.900	0.0011		
			337.900	0.0130		
			346.740	0.7500		
			382.100	0.0060		
			426.810	0.1870		
			479.200	0.0410		
			506.400	0.0430		
			517.990	0.0410		
			545.500	0.0012		
			545.700	0.0062		
			565.500	0.0280		
			598.200	0.0078		
			625.200	0.0010		
			642.300	0.0440		
			648.240	0.0037		
			649.470	0.0740		
			676.530	0.0180		
			715.000	0.0080		
			722.500	0.0110		
			756.700	0.0170		
			830.400	0.0050		
			873.190	0.0360		
			888.800	0.0150		
			892.710	0.0500		
			924.470	0.0078		
			928.200	0.0028		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
154 Tb m1	65	22.600 h	993.000	0.1750	1.1736	0.9314
			996.330	0.0330		
			1004.720	0.0760		
			1061.200	0.0450		
			1093.600	0.0037		
			1140.700	0.0250		
			1193.400	0.0320		
			1236.000	0.0065		
			1274.700	0.0021		
			1315.100	0.0037		
			1399.500	0.0058		
			1419.850	0.5000		
			1522.800	0.0024		
			1541.200	0.0045		
			1741.600	0.0060		
154 Ho	67	3.200 m	157.800	0.0480	1.5374	1.2360
			289.200	0.0520		
			295.800	0.1600		
			310.300	0.0370		
			334.600	1.2200		
			346.500	0.1500		
			407.000	0.3000		
			412.400	1.0200		
			434.900	0.0300		
			444.200	0.0620		
			471.900	0.0300		
			477.100	0.6800		
			505.100	0.2000		
			511.000	0.9000		
			523.800	0.2000		
			570.700	0.1200		
			725.600	0.1600		
			814.900	0.1600		
			906.000	0.0180		
			1250.500	0.2000		
155 Sm	62	22.100 m	61.550	0.0023	0.0414	0.0442
			78.650	0.0026		
			104.320	0.7500		
			141.411	0.0200		
			245.730	0.0375		
			522.540	0.0015		
155 Eu	63	4.963 y	45.298	0.0128	0.0223	0.0243
			60.010	0.0114		
			86.062	0.0015		
			86.543	0.3090		
			105.308	0.2060		
155 Tb	65	5.320 d	45.298	0.0120	0.0449	0.0449
			57.980	0.0015		
			60.010	0.0074		
			86.543	0.2300		
			105.308	0.1800		
			146.061	0.0010		
			148.650	0.0190		
			150.600	0.0017		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
155 Tb	65	5.320 d	158.600	0.0027	0.0449	0.0449
			160.500	0.0052		
			161.320	0.0210		
			162.800	0.0018		
			163.300	0.0330		
			175.200	0.0017		
			180.140	0.0650		
			181.630	0.0043		
			182.000	0.0010		
			200.300	0.0015		
			208.000	0.0019		
			220.000	0.0017		
			220.600	0.0031		
			226.800	0.0011		
			239.450	0.0016		
			262.450	0.0430		
			268.700	0.0045		
			281.000	0.0019		
			286.900	0.0019		
			321.800	0.0012		
			340.800	0.0077		
			367.400	0.0095		
			367.700	0.0059		
155 Dy	66	10.000 h	65.470	0.0190	0.2727	0.2173
			90.340	0.0132		
			118.330	0.0010		
			153.400	0.0010		
			155.780	0.0018		
			161.430	0.0121		
			184.530	0.0380		
			205.520	0.0036		
			227.000	0.6700		
			269.400	0.0017		
			271.000	0.0112		
			317.900	0.0018		
			322.600	0.0020		
			326.300	0.0013		
			334.800	0.0011		
			382.700	0.0017		
			403.800	0.0016		
			411.000	0.0014		
			433.000	0.0060		
			484.150	0.0108		
			496.300	0.0017		
			498.600	0.0144		
			508.400	0.0097		
			511.000	0.0287		
			549.600	0.0088		
			570.500	0.0018		
			586.300	0.0018		
			641.000	0.0115		
			653.700	0.0013		
			656.400	0.0018		
			664.200	0.0220		
			678.400	0.0018		
			743.800	0.0038		
			773.600	0.0011		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
155 Dy	66	10.000 h	812.000	0.0034	0.2727	0.2173
			825.700	0.0011		
			835.300	0.0023		
			838.000	0.0016		
			841.450	0.0025		
			891.000	0.0051		
			905.600	0.0230		
			925.430	0.0061		
			940.300	0.0030		
			996.400	0.0034		
			999.800	0.0240		
			1002.800	0.0034		
			1013.200	0.0032		
			1062.300	0.0036		
			1068.300	0.0053		
			1090.000	0.0270		
			1115.400	0.0037		
			1155.600	0.0200		
			1166.400	0.0159		
			1251.200	0.0088		
			1295.000	0.0018		
			1304.200	0.0014		
			1316.500	0.0015		
			1336.800	0.0043		
			1367.800	0.0073		
			1388.800	0.0011		
			1393.900	0.0024		
			1415.000	0.0025		
			1427.200	0.0035		
			1438.000	0.0030		
			1479.300	0.0054		
			1492.600	0.0054		
			1509.200	0.0025		
			1599.600	0.0024		
			1637.800	0.0084		
			1665.000	0.0091		
			1684.900	0.0010		
155 Ho	67	48.000 m	39.400	0.0370	0.1965	0.1552
			47.500	0.0120		
			86.800	0.0060		
			96.900	0.0067		
			103.900	0.0150		
			108.800	0.0032		
			115.500	0.0045		
			124.600	0.0018		
			136.300	0.0370		
			137.600	0.0037		
			146.700	0.0053		
			149.200	0.0011		
			163.000	0.0075		
			185.000	0.0160		
			189.000	0.0019		
			200.400	0.0045		
			200.900	0.0045		
			202.400	0.0082		
			208.500	0.0019		
			212.700	0.0034		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
155 Ho	67	48.000 m	216.300	0.0022	0.1965	0.1552
			218.800	0.0082		
			219.200	0.0082		
			240.300	0.0750		
			243.700	0.0011		
			247.900	0.0100		
			259.000	0.0012		
			262.300	0.0054		
			272.200	0.0035		
			286.000	0.0034		
			304.400	0.0026		
			309.600	0.0049		
			312.000	0.0022		
			321.300	0.0034		
			325.400	0.0160		
			336.400	0.0029		
			343.800	0.0041		
			344.400	0.0041		
			349.000	0.0041		
			353.300	0.0011		
			369.300	0.0046		
			383.600	0.0075		
			408.500	0.0082		
			416.600	0.0025		
			420.800	0.0041		
			456.000	0.0037		
			476.200	0.0015		
			479.000	0.0025		
			511.000	0.4526		
			523.600	0.0022		
			557.000	0.0016		
			566.200	0.0017		
			569.200	0.0018		
			648.400	0.0010		
			654.000	0.0013		
			699.500	0.0011		
			765.700	0.0014		
			834.700	0.0022		
			892.300	0.0025		
			897.000	0.0044		
			994.000	0.0034		
			1015.300	0.0035		
			1033.400	0.0056		
			1081.400	0.0037		
			1178.300	0.0025		
156 Sm	62	9.400 h	38.100	0.1430	0.0654	0.0600
			65.000	0.0150		
			87.600	0.2400		
			103.000	0.0140		
			165.800	0.1470		
			203.830	0.2300		
			219.000	0.0050		
			246.200	0.0132		
			268.700	0.0250		
			291.000	0.0300		
156 Eu	63	15.190 d	88.964	0.0890	0.6548	0.4825

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
156 Eu	63	15.190 d	199.210	0.0078	0.6548	0.4925
			434.400	0.0022		
			472.700	0.0014		
			490.340	0.0018		
			599.470	0.0226		
			646.290	0.0700		
			709.860	0.0090		
			723.470	0.0590		
			797.730	0.0011		
			811.770	0.1020		
			820.360	0.0016		
			841.160	0.0022		
			858.360	0.0012		
			865.980	0.0015		
			867.010	0.0138		
			907.000	0.0039		
			944.350	0.0137		
			947.460	0.0031		
			960.500	0.0159		
			961.000	0.0015		
			969.830	0.0038		
			1011.870	0.0033		
			1027.390	0.0012		
			1040.440	0.0052		
			1049.400	0.0031		
			1065.140	0.0510		
			1075.990	0.0037		
			1079.160	0.0480		
			1129.470	0.0014		
			1140.510	0.0029		
			1153.470	0.0700		
			1154.090	0.0520		
			1156.000	0.0014		
			1169.120	0.0022		
			1230.710	0.0880		
			1242.427	0.0660		
			1277.430	0.0315		
			1366.410	0.0172		
			1682.110	0.0030		
			1857.420	0.0025		
			1877.030	0.0169		
			1937.680	0.0210		
			1946.340	0.0019		
			1965.950	0.0410		
			2026.610	0.0347		
			2032.510	0.0013		
			2097.680	0.0420		
			2115.490	0.0012		
			2180.910	0.0239		
			2186.710	0.0390		
			2205.380	0.0098		
			2269.900	0.0110		
156 Tb	65	5.000 h	88.400	0.0113	0.0004	0.0005
156 Tb	65	1.017 d	49.630	0.4983	0.0184	0.0140
156 Tb	65	5.340 d	88.970	0.1830	0.9274	0.7048

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
156 Tb	65	5.340 d	111.930	0.0144	0.9274	0.7048
			115.610	0.0090		
			155.150	0.0150		
			199.190	0.3790		
			201.250	0.0050		
			262.530	0.0540		
			296.500	0.0400		
			356.490	0.1260		
			381.100	0.0054		
			422.420	0.0700		
			534.330	0.6100		
			576.200	0.0200		
			578.910	0.0042		
			614.610	0.0017		
			626.800	0.0029		
			658.120	0.0019		
			686.310	0.0040		
			689.400	0.0016		
			691.800	0.0021		
			697.700	0.0012		
			704.320	0.0014		
			747.850	0.0025		
			780.140	0.0223		
			804.840	0.0023		
			841.100	0.0022		
			855.250	0.0029		
			860.880	0.0013		
			865.820	0.0031		
			925.860	0.0361		
			949.170	0.0139		
			959.760	0.0174		
			987.830	0.0027		
			1037.870	0.0100		
			1040.490	0.0060		
			1065.100	0.1020		
			1067.250	0.0290		
			1129.370	0.0015		
			1154.090	0.1000		
			1158.940	0.0680		
			1174.260	0.0011		
			1187.140	0.0053		
			1222.360	0.2940		
			1230.720	0.0076		
			1242.510	0.0018		
			1266.100	0.0106		
			1334.450	0.0232		
			1421.620	0.1170		
			1646.140	0.0344		
			1815.200	0.0038		
			1845.380	0.0380		
			2014.200	0.0106		
157 Sm	62	1.383 m	121.500	1.0000	0.0551	0.0589
157 Eu	63	15.150 h	52.000	0.1580	0.1631	0.1368
			54.500	0.5100		
			64.000	0.4500		
			68.300	0.0050		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
157 Eu	63	15.150 h	77.000	0.0060	0.1631	0.1368
			132.000	0.0010		
			160.000	0.0010		
			210.000	0.0018		
			275.000	0.0010		
			320.000	0.0300		
			336.000	0.0090		
			361.000	0.0040		
			373.000	0.1060		
			382.000	0.0030		
			401.000	0.0130		
			411.000	0.0100		
			413.000	0.1840		
			423.000	0.0090		
			437.000	0.0030		
			453.000	0.0100		
			463.000	0.0070		
			477.000	0.0200		
			526.000	0.0010		
			571.000	0.0170		
			619.000	0.0440		
			687.000	0.0120		
			701.000	0.0030		
			752.000	0.0040		
			765.000	0.0040		
157 Gd	64	1.000E-06 s	51.800	0.5200	0.2260	0.2121
			54.500	0.6800		
			64.000	0.3020		
			65.200	0.5200		
			77.000	0.3580		
			95.900	0.3690		
			116.000	0.0200		
			131.500	0.0100		
			172.900	0.0820		
			199.000	0.4520		
			245.000	0.5450		
157 Dy	66	8.100 h	60.820	0.0027	0.1778	0.1650
			83.010	0.0053		
			182.200	0.0195		
			265.340	0.0019		
			326.160	0.9520		
157 Ho	67	12.600 m	61.000	0.6340	0.2744	0.2348
			86.500	0.2450		
			98.800	0.0012		
			106.500	0.0083		
			109.800	0.0140		
			121.000	0.0032		
			126.900	0.0068		
			129.900	0.0073		
			131.900	0.0010		
			147.700	0.0323		
			150.000	0.0083		
			153.000	0.0315		
			162.400	0.0216		
			173.300	0.0068		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
157 Ho	67	12.600 m	188.000	0.0430	0.2744	0.2348
			193.400	0.0974		
			196.500	0.0077		
			208.800	0.0132		
			234.600	0.0097		
			253.200	0.0015		
			258.000	0.0120		
			269.400	0.0018		
			272.200	0.0467		
			273.800	0.0027		
			280.000	0.2375		
			297.000	0.0083		
			320.200	0.0220		
			341.000	0.1740		
			359.000	0.0053		
			360.600	0.0054		
			379.200	0.0013		
			388.400	0.0045		
			420.000	0.0029		
			430.400	0.0012		
			463.300	0.0029		
			466.000	0.0018		
			476.600	0.0059		
			508.300	0.0300		
			511.000	0.0950		
			522.800	0.0010		
			540.500	0.0012		
			555.600	0.0282		
			570.200	0.0055		
			627.000	0.0024		
			649.000	0.0032		
			661.900	0.0024		
			685.500	0.0087		
			688.000	0.0035		
			703.000	0.0017		
			708.600	0.0135		
			748.900	0.0018		
			779.000	0.0045		
			791.200	0.0022		
			835.400	0.0100		
			842.400	0.0017		
			870.000	0.0096		
			896.600	0.0414		
			929.000	0.0062		
			1038.700	0.0010		
			1063.400	0.0010		
			1150.000	0.0083		
			1191.900	0.0013		
			1211.000	0.0224		
			1318.000	0.0018		
			1380.000	0.0023		
158 Eu	63	45.900 m	79.500	0.1119	0.5486	0.4028
			182.000	0.0200		
			528.000	0.0129		
			606.400	0.0333		
			698.600	0.0089		
			743.000	0.0300		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
158 Eu	63	45.900 m	751.700	0.0024	0.5486	0.4028
			763.900	0.0053		
			769.900	0.0054		
			777.000	0.0066		
			780.000	0.0076		
			816.300	0.0030		
			824.000	0.0100		
			827.900	0.0033		
			852.800	0.0033		
			870.700	0.0020		
			870.700	0.0100		
			897.600	0.1038		
			906.500	0.0154		
			917.300	0.0023		
			922.400	0.0026		
			922.500	0.0136		
			925.600	0.0010		
			940.600	0.0028		
			944.200	0.2520		
			953.000	0.0166		
			962.000	0.0159		
			977.000	0.1368		
			987.000	0.0113		
			998.500	0.0030		
			1004.000	0.0040		
			1005.400	0.0100		
			1034.500	0.0012		
			1061.700	0.0027		
			1107.600	0.0430		
			1116.500	0.0100		
			1138.700	0.0018		
			1141.500	0.0015		
			1180.400	0.0033		
			1184.000	0.0255		
			1186.000	0.0247		
			1187.000	0.0370		
			1233.700	0.0013		
			1259.900	0.0033		
			1263.600	0.0184		
			1265.600	0.0018		
			1292.300	0.0022		
			1301.700	0.0015		
			1312.000	0.0022		
			1323.500	0.0020		
			1348.000	0.0139		
			1372.000	0.0017		
			1702.800	0.0011		
			1714.000	0.0015		
			1738.000	0.0010		
			1850.300	0.0013		
			1884.600	0.0100		
			1944.500	0.0136		
			1964.200	0.0011		
			2023.900	0.0078		
			2246.000	0.0039		
			2367.700	0.0066		
			2447.400	0.0064		
			2451.200	0.0019		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
158 Tb	65	150.103 y	79.600	0.1148	0.4153	0.3071
			99.000	0.0465		
			181.900	0.0940		
			218.200	0.0093		
			780.200	0.0949		
			898.000	0.0011		
			898.000	0.0017		
			944.200	0.4360		
			962.200	0.2000		
			977.500	0.0016		
			1107.700	0.0214		
			1187.200	0.0165		
159 Eu	63	18.700 m	67.800	0.6900	0.5050	0.3932
			71.400	0.0386		
			78.600	0.3276		
			80.400	0.0445		
			90.400	0.0222		
			95.700	0.2516		
			102.500	0.0234		
			105.500	0.0257		
			108.800	0.0100		
			121.900	0.0140		
			146.400	0.1170		
			159.800	0.0500		
			176.900	0.0468		
			227.500	0.0585		
			498.200	0.0117		
			521.400	0.0058		
			551.300	0.0140		
			575.500	0.0094		
			588.600	0.0140		
			596.000	0.0117		
			602.200	0.0316		
			613.400	0.0456		
			645.700	0.0129		
			659.500	0.0480		
			664.900	0.1100		
			676.600	0.0679		
			681.900	0.0830		
			693.800	0.0176		
			720.400	0.0058		
			726.500	0.0234		
			733.000	0.0088		
			744.300	0.0328		
			753.900	0.0328		
			763.000	0.0117		
			804.700	0.0924		
			829.700	0.0200		
			871.400	0.0076		
			880.800	0.0117		
			915.700	0.0058		
			936.000	0.0100		
			1015.000	0.0176		
			1038.200	0.0070		
			1043.700	0.0187		
			1060.400	0.0100		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
159 Eu	63	18.700 m	1078.400	0.0094	0.5050	0.3932
			1094.800	0.0433		
			1109.000	0.0090		
			1128.400	0.0187		
			1159.400	0.0022		
			1181.600	0.0041		
			1220.700	0.0070		
			1301.500	0.0117		
			1350.800	0.0043		
			1433.700	0.0088		
			1451.600	0.0070		
			1468.600	0.0100		
			1520.000	0.0234		
159 Gd	64	18.560 h	58.000	0.2625	0.0312	0.0280
			79.500	0.0020		
			226.000	0.0020		
			343.170	0.0022		
			363.560	0.1044		
159 Dy	66	1.150E-04 s	57.000	0.9000	0.1635	0.1690
			63.000	0.0500		
			80.000	0.6100		
			100.000	0.5300		
			113.000	0.2600		
			117.000	0.6800		
			121.000	0.2000		
			137.000	0.0500		
			153.000	0.0200		
			178.000	0.0300		
			180.000	0.1300		
			217.000	0.0600		
159 Dy	66	144.400 d	58.000	0.2600	0.0088	0.0081
159 Ho	67	33.000 m	41.000	0.0052	0.1483	0.1357
			56.700	0.0549		
			72.500	0.0027		
			79.900	0.0120		
			85.700	0.0018		
			99.500	0.0032		
			100.600	0.0415		
			103.000	0.0017		
			121.000	0.3645		
			132.000	0.2430		
			136.400	0.0050		
			152.400	0.0126		
			155.800	0.0233		
			159.400	0.0043		
			173.000	0.0249		
			177.600	0.0669		
			186.300	0.0357		
			217.700	0.0360		
			252.900	0.1500		
			258.900	0.0140		
			265.500	0.0017		
			296.000	0.0090		
			309.600	0.1545		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
159 Ho	67	33.000 m	338.700	0.0063	0.1483	0.1357
			395.400	0.0029		
			620.900	0.0027		
			706.700	0.0099		
			766.300	0.0010		
			807.400	0.0100		
			838.700	0.0315		
			850.700	0.0025		
			881.300	0.0034		
			898.000	0.0032		
			912.700	0.0025		
			1016.300	0.0040		
			1018.900	0.0020		
			1024.300	0.0017		
			1075.700	0.0011		
			1201.900	0.0015		
160 Tb	65	72.300 d	86.788	0.1320	0.6013	0.4536
			197.035	0.0515		
			215.648	0.0395		
			298.575	0.2690		
			309.561	0.0085		
			337.327	0.0032		
			392.500	0.0134		
			682.310	0.0057		
			765.280	0.0200		
			872.030	0.0021		
			879.362	0.2950		
			962.302	0.0980		
			966.155	0.2500		
			1002.880	0.0102		
			1102.600	0.0053		
			1115.120	0.0153		
			1177.938	0.1520		
			1199.890	0.0232		
			1271.861	0.0750		
			1312.140	0.0292		
161 Gd	64	3.700 m	56.200	0.0455	0.2204	0.1989
			77.200	0.0200		
			85.500	0.0019		
			102.200	0.1620		
			105.500	0.0100		
			134.000	0.0019		
			165.400	0.0253		
			181.000	0.0065		
			191.500	0.0065		
			258.500	0.0110		
			271.000	0.0091		
			283.500	0.0680		
			315.000	0.2400		
			338.000	0.0190		
			360.700	0.6500		
			394.400	0.0023		
			424.000	0.0019		
			479.700	0.0300		
			529.000	0.0136		
161 Tb	65	6.910 d	49.000	0.1480	0.0095	0.0084

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
161 Tb	65	6.910 d	57.200	0.0160	0.0095	0.0084
			74.580	0.0980		
			88.000	0.0017		
161 Ho	67	2.500 h	43.840	0.0100	0.0117	0.0123
			49.000	0.0034		
			59.230	0.0260		
			77.420	0.1900		
			98.000	0.0170		
			103.000	0.0430		
			157.300	0.0050		
			175.400	0.0060		
161 Er	68	7.500E-06 s	59.500	0.8500	0.1683	0.1740
			84.500	1.0000		
			100.000	0.2100		
			106.000	0.5000		
			131.000	0.2000		
			144.000	0.0400		
			147.000	0.5100		
			190.600	0.0800		
			253.000	0.0800		
161 Er	68	3.240 h	76.230	0.0360	0.4767	0.3582
			87.530	0.0200		
			90.000	0.0022		
			94.130	0.0400		
			99.630	0.0170		
			105.400	0.0025		
			105.700	0.0012		
			107.300	0.0017		
			109.900	0.0023		
			130.850	0.0130		
			148.160	0.0044		
			152.700	0.0014		
			201.470	0.0120		
			209.360	0.0100		
			211.150	0.2800		
			212.770	0.0087		
			236.430	0.0055		
			252.680	0.0053		
			294.000	0.0048		
			303.520	0.0039		
			314.770	0.0260		
			446.900	0.0038		
			507.700	0.0023		
			511.000	0.0029		
			528.000	0.0037		
			540.000	0.0026		
			592.600	0.0330		
			649.200	0.0070		
			726.600	0.0074		
			799.400	0.0016		
			804.400	0.0022		
			808.800	0.0018		
			808.800	0.0010		
			812.000	0.0025		
			826.500	0.6150		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
161 Er	68	3.240 h	839.500	0.0010	0.4767	0.3582
			865.000	0.0120		
			868.700	0.0037		
			868.900	0.0030		
			875.900	0.0027		
			878.900	0.0018		
			895.700	0.0060		
			895.700	0.0013		
			931.700	0.0012		
			931.700	0.0170		
			940.900	0.0015		
			962.400	0.0017		
			970.300	0.0010		
			970.600	0.0012		
			973.000	0.0022		
			980.300	0.0010		
			998.800	0.0010		
			1010.700	0.0010		
			1078.000	0.0010		
			1098.200	0.0023		
			1098.300	0.0026		
			1102.600	0.0022		
			1102.700	0.0017		
			1117.800	0.0020		
			1144.900	0.0052		
			1147.600	0.0013		
			1158.900	0.0052		
			1171.700	0.0044		
			1171.800	0.0038		
			1174.500	0.0055		
			1174.500	0.0062		
			1183.000	0.0032		
			1183.500	0.0033		
			1185.800	0.0032		
			1193.200	0.0013		
			1193.200	0.0040		
			1193.300	0.0060		
			1209.800	0.0038		
			1228.000	0.0012		
			1228.300	0.0012		
			1247.200	0.0025		
			1250.500	0.0036		
			1268.200	0.0010		
			1276.200	0.0014		
			1276.500	0.0010		
			1279.900	0.0053		
			1303.300	0.0032		
			1338.200	0.0022		
			1358.200	0.0060		
			1361.300	0.0010		
			1383.200	0.0013		
			1417.800	0.0059		
			1429.000	0.0032		
			1429.300	0.0032		
			1434.500	0.0019		
			1452.800	0.0010		
			1461.800	0.0013		
			1464.500	0.0023		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
161 Er	68	3.240 h	1488.500	0.0016	0.4767	0.3582
			1492.400	0.0013		
			1553.900	0.0015		
			1656.800	0.0057		
			1740.000	0.0040		
161 Tm	69	38.000 m	45.600	0.4680	0.1060	0.0997
			59.500	0.8930		
			78.300	0.0040		
			84.500	0.3870		
			94.300	0.0570		
			106.000	0.0720		
			112.600	0.0700		
			122.600	0.0350		
			138.700	0.0100		
			144.000	0.0320		
			146.700	0.0730		
			156.500	0.0060		
			172.000	0.0750		
			172.600	0.0100		
			190.600	0.0270		
			207.000	0.0790		
			218.200	0.0100		
			244.500	0.0080		
			252.500	0.0160		
162 Gd	64	9.000 m	38.800	0.0660	0.2490	0.2024
			402.800	0.4700		
			441.600	0.5400		
162 Tb	65	7.700 m	80.660	0.0710	0.6028	0.4621
			185.000	0.0250		
			185.289	0.1330		
			260.000	0.7900		
			622.000	0.0090		
			697.400	0.0240		
			807.650	0.4500		
			882.300	0.1180		
			888.170	0.3900		
			1067.000	0.0063		
			1195.600	0.0010		
162 Ho	67	15.000 m	80.660	0.0770	0.0649	0.0497
			185.000	0.0070		
			392.800	0.0050		
			511.000	0.0840		
			795.540	0.0030		
			980.180	0.0020		
			1188.000	0.0044		
			1319.600	0.0370		
			1372.800	0.0077		
162 Ho m	67	68.000 m	80.660	0.0900	0.2782	0.2159
			185.000	0.2900		
			188.716	0.0023		
			275.600	0.0080		
			278.400	0.0023		
			282.864	0.1150		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
162 Ho m	67	68.000 m	302.880	0.0038	0.2782	0.2159
			334.000	0.0032		
			424.700	0.0047		
			467.900	0.0024		
			634.200	0.0011		
			795.540	0.0027		
			807.650	0.0012		
			842.500	0.0046		
			882.300	0.0037		
			917.130	0.0059		
			937.000	0.1090		
			944.600	0.0016		
			980.189	0.0026		
			1125.800	0.0119		
			1130.000	0.0038		
			1134.600	0.0013		
			1220.000	0.2300		
162 Tm m	69	24.300 s	66.900	0.0730	0.2049	0.1530
			102.000	0.0260		
			227.520	0.0500		
			337.510	0.0160		
			345.400	0.0066		
			354.600	0.0059		
			453.000	0.0070		
			477.900	0.0070		
			511.000	0.0520		
			583.500	0.0033		
			672.400	0.0090		
			709.990	0.0360		
			713.200	0.0070		
			798.680	0.0560		
			799.000	0.0560		
			811.520	0.0660		
			899.900	0.0680		
			900.700	0.0680		
162 Tm	69	21.700 m	102.000	0.1750	0.6652	0.4943
			227.520	0.0710		
			453.020	0.0037		
			465.110	0.0025		
			499.200	0.0014		
			511.000	0.1502		
			519.670	0.0059		
			570.740	0.0195		
			571.200	0.0019		
			634.500	0.0017		
			672.330	0.0560		
			672.400	0.0184		
			720.100	0.0015		
			764.400	0.0023		
			798.680	0.0840		
			799.000	0.0077		
			821.500	0.0032		
			830.470	0.0020		
			841.430	0.0065		
			899.900	0.0560		
			900.700	0.0650		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
162 Tm	69	21.700 m	929.250	0.0018	0.6652	0.4943
			957.400	0.0012		
			966.240	0.0017		
			985.120	0.0115		
			993.640	0.0048		
			1007.600	0.0018		
			1010.560	0.0029		
			1027.080	0.0091		
			1036.600	0.0017		
			1069.010	0.0110		
			1092.500	0.0014		
			1096.020	0.0044		
			1100.000	0.0137		
			1115.960	0.0023		
			1119.600	0.0014		
			1125.500	0.0022		
			1170.820	0.0075		
			1171.000	0.0016		
			1199.800	0.0011		
			1213.300	0.0028		
			1220.630	0.0068		
			1243.000	0.0011		
			1250.010	0.0480		
			1254.720	0.0146		
			1289.400	0.0016		
			1293.420	0.0053		
			1310.800	0.0038		
			1318.420	0.0560		
			1328.140	0.0087		
			1352.200	0.0340		
			1398.200	0.0038		
			1404.230	0.0284		
			1410.890	0.0028		
			1412.240	0.0028		
			1415.900	0.0014		
			1430.450	0.0044		
			1447.700	0.0017		
			1451.300	0.0021		
			1470.800	0.0060		
			1476.000	0.0014		
			1493.500	0.0016		
			1500.000	0.0012		
			1506.400	0.0138		
			1521.320	0.0065		
			1533.300	0.0031		
			1536.100	0.0039		
			1549.200	0.0028		
			1573.000	0.0018		
			1575.800	0.0014		
			1595.800	0.0043		
			1616.300	0.0022		
			1627.600	0.0043		
			1690.000	0.0050		
			1698.100	0.0050		
			1704.400	0.0011		
			1716.000	0.0012		
			1754.680	0.0074		
			1763.400	0.0015		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
162 Tm	69	21.700 m	1792.300	0.0018	0.6652	0.4943
			1829.200	0.0050		
			1838.100	0.0027		
			1846.900	0.0015		
			1862.000	0.0028		
			1864.300	0.0031		
			1872.900	0.0012		
			1874.700	0.0023		
			1914.710	0.0060		
			1924.050	0.0072		
			1931.540	0.0059		
			1959.250	0.0055		
			1961.500	0.0019		
			1969.300	0.0020		
			1974.720	0.0122		
			1983.400	0.0014		
			2012.300	0.0043		
			2015.750	0.0112		
			2036.600	0.0011		
			2049.200	0.0015		
			2062.100	0.0012		
			2083.400	0.0020		
			2089.900	0.0025		
			2097.400	0.0016		
			2103.840	0.0035		
			2130.500	0.0046		
			2140.200	0.0126		
			2158.170	0.0030		
			2192.350	0.0029		
			2216.800	0.0055		
			2231.700	0.0084		
			2257.400	0.0011		
			2260.900	0.0011		
			2319.100	0.0013		
			2335.300	0.0011		
			2358.500	0.0011		
			2376.300	0.0011		
			2389.800	0.0012		
			2395.100	0.0025		
			2449.900	0.0017		
			2465.100	0.0014		
			2480.000	0.0019		
			2502.100	0.0014		
			2505.300	0.0013		
			2516.860	0.0011		
			2543.100	0.0013		
			2603.600	0.0021		
			2698.800	0.0011		
			2712.700	0.0014		
			2813.500	0.0011		
			2949.500	0.0011		
			2960.800	0.0016		
			3077.800	0.0012		
			3165.500	0.0023		
			3181.200	0.0018		
			3191.200	0.0025		
			3286.900	0.0024		
			3292.100	0.0015		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
162 Tm	69	21.700 m	3297.900	0.0065	0.6652	0.4943
			3389.500	0.0032		
			3393.600	0.0011		
			3400.300	0.0024		
			3415.700	0.0026		
			3435.800	0.0011		
			3533.500	0.0011		
			3574.580	0.0042		
			3587.200	0.0015		
162 Yb	70	18.900 m	44.660	0.0610	0.1203	0.1221
			118.770	0.6900		
			163.470	1.0000		
164 Tb	65	3.000 m	37.700	0.0020	1.0896	0.8335
			73.400	0.7840		
			98.127	0.0040		
			123.320	0.0160		
			131.000	0.0060		
			145.880	0.0020		
			148.700	0.0400		
			154.180	0.0010		
			159.450	0.0060		
			168.838	0.3400		
			174.400	0.0030		
			185.860	0.0040		
			196.750	0.0020		
			200.520	0.0040		
			206.780	0.0160		
			211.100	0.0600		
			215.000	0.2070		
			259.000	0.0440		
			277.500	0.0800		
			294.580	0.0680		
			309.120	0.0170		
			344.830	0.0520		
			410.340	0.0590		
			415.000	0.0020		
			425.000	0.0090		
			461.500	0.0050		
			465.000	0.0090		
			484.700	0.0040		
			508.000	0.0130		
			519.650	0.0040		
			523.300	0.0060		
			548.540	0.0800		
			563.800	0.0200		
			567.000	0.0040		
			583.500	0.0060		
			585.900	0.0400		
			607.000	0.0080		
			611.000	0.1900		
			617.820	0.1140		
			626.000	0.0050		
			633.000	0.0040		
			647.300	0.0290		
			654.500	0.0030		
			671.170	0.0090		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
164 Tb	65	3.000 m	673.670	0.0890	1.0896	0.8335
			688.460	0.2000		
			701.000	0.0040		
			707.700	0.0030		
			724.500	0.0040		
			744.400	0.0030		
			754.770	0.2200		
			761.700	0.1630		
			770.200	0.0050		
			779.000	0.0130		
			782.620	0.0540		
			796.700	0.0060		
			802.000	0.0060		
			807.000	0.0200		
			810.000	0.0100		
			843.000	0.0300		
			845.000	0.0550		
			856.000	0.0040		
			874.700	0.0040		
			903.000	0.0030		
			910.000	0.0030		
			966.000	0.0140		
			969.000	0.0040		
			983.000	0.0080		
			1015.500	0.0070		
			1022.000	0.0040		
			1034.600	0.0050		
			1050.000	0.0020		
			1104.300	0.0100		
			1123.400	0.0140		
			1125.000	0.0040		
			1135.000	0.0030		
			1148.470	0.0170		
			1152.000	0.0090		
			1154.800	0.0100		
			1166.200	0.0190		
			1169.400	0.0120		
			1169.400	0.0100		
			1180.600	0.0080		
			1189.700	0.0030		
			1196.200	0.0030		
			1224.000	0.0020		
			1257.500	0.0020		
			1270.600	0.0060		
			1278.200	0.0220		
			1289.800	0.0160		
			1289.800	0.0400		
			1320.000	0.0100		
			1330.000	0.0050		
			1366.000	0.0190		
			1377.500	0.0490		
			1393.000	0.0040		
			1395.000	0.0030		
			1411.000	0.0020		
			1426.200	0.0050		
			1433.000	0.0040		
			1443.900	0.0800		
			1485.200	0.0030		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
164 Tb	65	3.000 m	1652.500	0.0040	1.0896	0.8335
			1656.700	0.0090		
			1878.000	0.0030		
			1889.000	0.0020		
			1916.000	0.0020		
			1926.000	0.0020		
			1932.000	0.0030		
			1951.000	0.0040		
			1963.500	0.0070		
			1990.000	0.0020		
			2070.400	0.0010		
			2084.000	0.0030		
			2100.000	0.0030		
			2121.400	0.0030		
			2132.000	0.0080		
			2174.500	0.0040		
			2500.000	0.0020		
			2504.000	0.0030		
			2511.000	0.0130		
			2759.200	0.0030		
			2763.300	0.0020		
164 Ho	67	29.000 m	73.400	0.0090	0.0011	0.0012
			91.390	0.0200		
164 Tm	69	2.000 m	91.390	0.3500	0.3677	0.2824
			208.000	0.0146		
			315.460	0.0012		
			511.000	0.7936		
			595.140	0.0043		
			769.000	0.0144		
			842.000	0.0040		
			855.000	0.0028		
			860.300	0.0113		
			905.660	0.0034		
			1015.220	0.0016		
			1057.850	0.0046		
			1154.630	0.0168		
			1165.450	0.0075		
			1184.320	0.0017		
			1223.120	0.0064		
			1295.400	0.0098		
			1312.390	0.0044		
			1314.800	0.0032		
			1325.180	0.0077		
			1342.590	0.0014		
			1386.740	0.0065		
			1392.520	0.0013		
			1418.000	0.0016		
			1486.400	0.0042		
			1489.250	0.0040		
			1534.000	0.0015		
			1610.740	0.0112		
			1674.350	0.0100		
			1696.860	0.0028		
			1742.000	0.0022		
			1819.840	0.0040		
			1833.420	0.0010		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
164 Tm	69	2.000 m	1862.520	0.0052	0.3677	0.2824
			1935.000	0.0018		
			1977.820	0.0010		
			2022.520	0.0010		
			2081.600	0.0065		
			2353.000	0.0013		
			2383.630	0.0042		
164 Tm m	69	5.100 m	80.320	0.0068	0.2057	0.1625
			91.390	0.0480		
			101.240	0.0019		
			139.430	0.0293		
			208.000	0.1670		
			240.490	0.0850		
			315.000	0.1100		
			385.490	0.0032		
			410.200	0.0162		
			511.000	0.0084		
			547.000	0.0510		
			583.230	0.0081		
			624.900	0.0030		
			647.000	0.0020		
			736.700	0.0018		
			743.900	0.0012		
			758.800	0.0049		
			820.670	0.0150		
			855.000	0.0089		
			898.000	0.0487		
			929.900	0.0014		
			960.700	0.0020		
			967.400	0.0012		
			1049.840	0.0175		
			1130.000	0.0037		
			1140.000	0.0019		
			1231.190	0.0460		
			1364.600	0.0467		
			1370.750	0.0107		
			1498.000	0.0016		
165 Dy m	66	1.258 m	108.160	0.0294	0.0073	0.0062
			153.800	0.0027		
			361.680	0.0054		
			515.467	0.0155		
165 Dy	66	2.334 h	94.700	0.0360	0.0092	0.0077
			279.763	0.0050		
			361.680	0.0084		
			545.834	0.0016		
			565.718	0.0013		
			633.415	0.0057		
			715.328	0.0053		
165 Tm	69	1.253 d	30.000	0.0016	0.3166	0.2622
			35.280	0.0032		
			47.160	0.1760		
			53.200	0.0200		
			54.440	0.1890		
			59.160	0.0087		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
165 Tm	69	1.253 d	60.400	0.0740	0.3166	0.2622
			62.700	0.0200		
			70.650	0.0180		
			77.260	0.0390		
			87.000	0.0027		
			88.200	0.0029		
			113.600	0.0500		
			150.850	0.0048		
			165.600	0.0020		
			195.700	0.0074		
			205.400	0.0056		
			210.000	0.0067		
			218.800	0.0300		
			233.200	0.0014		
			238.400	0.0014		
			242.900	0.4330		
			248.900	0.0140		
			250.000	0.0010		
			264.650	0.0053		
			279.200	0.0058		
			292.300	0.0042		
			292.300	0.0150		
			296.000	0.0620		
			297.360	0.1880		
			307.000	0.0015		
			312.300	0.0088		
			330.700	0.0027		
			346.800	0.0360		
			346.800	0.0059		
			356.500	0.0400		
			365.500	0.0068		
			384.200	0.0019		
			389.200	0.0270		
			400.400	0.0017		
			414.600	0.0014		
			421.000	0.0032		
			430.400	0.0022		
			442.600	0.0088		
			448.300	0.0270		
			456.300	0.0079		
			460.200	0.0400		
			471.800	0.0042		
			477.600	0.0038		
			484.400	0.0022		
			487.300	0.0130		
			513.500	0.0060		
			526.900	0.0093		
			531.000	0.0025		
			536.900	0.0025		
			542.400	0.0180		
			557.300	0.0012		
			558.200	0.0020		
			563.900	0.0250		
			573.200	0.0060		
			577.800	0.0022		
			589.700	0.0230		
			605.600	0.0012		
			608.400	0.0034		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
165 Tm	69	1.253 d	611.000	0.0034	0.3166	0.2622
			623.200	0.0014		
			664.700	0.0058		
			677.600	0.0022		
			680.700	0.0013		
			698.600	0.0095		
			791.000	0.0073		
			806.800	0.0840		
			827.400	0.0010		
			837.500	0.0049		
			855.000	0.0013		
			932.700	0.0010		
			1043.000	0.0012		
			1046.400	0.0010		
			1131.000	0.0140		
			1184.500	0.0260		
			1289.000	0.0019		
			1364.000	0.0010		
			1380.000	0.0050		
			1427.000	0.0089		
165 Yb	70	9.900 m	68.900	0.0629	0.1230	0.0985
			80.000	0.3700		
			91.700	0.0044		
			104.300	0.0015		
			118.000	0.0178		
			129.900	0.0040		
			147.300	0.0067		
			156.500	0.001		
			170.300	0.0040		
			185.800	0.0024		
			203.300	0.0020		
			232.500	0.0014		
			275.500	0.0011		
			304.000	0.0060		
			320.800	0.0013		
			361.500	0.0013		
			433.000	0.0011		
			479.600	0.0018		
			511.000	0.1911		
			636.500	0.0012		
			655.800	0.0021		
			784.300	0.0020		
			825.800	0.0013		
			830.300	0.0010		
			878.600	0.0014		
			935.000	0.0026		
			956.500	0.0063		
			999.200	0.0040		
			1029.900	0.0045		
			1073.300	0.0053		
			1090.000	0.0037		
			1090.000	0.0259		
			1117.200	0.0013		
			1165.200	0.0014		
			1219.500	0.0030		
			1239.200	0.0016		
			1265.600	0.0011		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
165 Yb	70	9.900 m	1296.000	0.0018	0.1230	0.0985
			1329.000	0.0018		
			1421.000	0.0017		
			1451.900	0.0012		
			1501.000	0.0031		
166 Dy	66	3.400 d	54.239	0.0067	0.0073	0.0074
			82.470	0.1300		
			371.750	0.0046		
			426.000	0.0054		
166 Ho	67	1.117 d	80.574	0.0620	0.0111	0.0090
			1379.430	0.0093		
			1581.890	0.0018		
			1662.440	0.0012		
166 Ho m	67	1200.822 y	80.574	0.1270	0.9666	0.7404
			94.650	0.0014		
			119.040	0.0018		
			121.160	0.0027		
			135.240	0.0010		
			161.750	0.0011		
			184.407	0.7500		
			190.711	0.0022		
			214.760	0.0056		
			215.880	0.0265		
			231.280	0.0025		
			259.716	0.0112		
			280.456	0.3040		
			300.744	0.0380		
			339.780	0.0017		
			365.739	0.0257		
			410.941	0.1180		
			451.524	0.0312		
			464.830	0.0125		
			529.810	0.1040		
			571.000	0.0590		
			594.370	0.0071		
			611.520	0.0142		
			639.770	0.0016		
			644.450	0.0018		
			670.510	0.0590		
			691.210	0.0156		
			711.690	0.6000		
			736.670	0.0010		
			752.270	0.1340		
			778.820	0.0337		
			810.310	0.6400		
			830.560	0.1080		
			875.640	0.0081		
			950.940	0.0310		
			1120.310	0.0024		
			1146.820	0.0022		
			1241.440	0.0102		
			1282.120	0.0024		
			1400.720	0.0056		
			1427.050	0.0060		
166 Tm	69	7.700 h	73.500	0.0010	0.9256	0.6882

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
166 Tm	69	7.700 h	80.574	0.1147	0.9256	0.6882
			84.150	0.0049		
			96.800	0.0012		
			131.000	0.0120		
			154.450	0.0037		
			170.350	0.0010		
			184.400	0.1600		
			194.800	0.0120		
			215.200	0.0550		
			228.150	0.0030		
			238.500	0.0040		
			280.456	0.0029		
			298.000	0.0040		
			345.700	0.0037		
			389.400	0.0037		
			403.900	0.0088		
			410.900	0.0015		
			429.700	0.0022		
			459.600	0.0290		
			496.700	0.0026		
			511.000	0.0333		
			520.900	0.0024		
			529.813	0.0028		
			543.400	0.0010		
			557.700	0.0025		
			563.200	0.0020		
			594.370	0.0280		
			598.700	0.0160		
			604.300	0.0020		
			654.600	0.0025		
			672.000	0.0700		
			674.600	0.0200		
			691.210	0.0730		
			702.400	0.0100		
			705.300	0.1040		
			712.400	0.0060		
			729.400	0.0060		
			757.700	0.0240		
			778.817	0.2000		
			785.890	0.0960		
			810.300	0.0100		
			875.640	0.0400		
			928.000	0.0060		
			1045.800	0.0030		
			1057.500	0.0070		
			1078.900	0.0060		
			1084.800	0.0040		
			1120.800	0.0020		
			1152.300	0.0120		
			1161.400	0.0034		
			1176.500	0.0850		
			1203.900	0.0090		
			1216.300	0.0063		
			1235.300	0.0150		
			1263.200	0.0100		
			1273.400	0.1460		
			1300.800	0.0120		
			1347.000	0.0090		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
166 Tm	69	7.700 h	1374.300	0.0530	0.9256	0.6882
			1430.900	0.0070		
			1505.000	0.0083		
			1653.200	0.0100		
			1837.400	0.0054		
			1868.200	0.0430		
			1895.700	0.0083		
			2052.900	0.2020		
			2080.000	0.0720		
166 Yb	70	2.363 d	82.290	0.1522	0.0056	0.0061
166 Lu m2	71	1.410 m	102.380	1.1000	3.8862	2.9385
			152.490	0.1300		
			228.120	1.4000		
			285.070	1.0000		
			345.000	0.0400		
			407.000	0.0400		
			412.200	0.1100		
			421.260	0.1900		
			464.290	0.0700		
			470.400	0.0500		
			526.010	0.2700		
			568.500	0.0700		
			570.930	0.2900		
			581.000	0.1100		
			625.300	0.0600		
			643.200	0.3200		
			680.900	0.0600		
			701.900	0.0900		
			705.080	0.4000		
			708.820	0.1300		
			747.100	0.0400		
			811.920	0.8900		
			830.060	0.9300		
			832.200	0.2400		
			866.400	0.1100		
			932.350	0.7300		
			936.790	0.7500		
			984.600	0.2000		
			1023.800	0.0600		
			1054.700	0.0800		
			1060.280	0.0500		
			1276.920	0.1100		
			1283.450	0.3500		
			1349.400	0.0500		
			1354.350	0.0900		
			1504.900	0.1100		
			1582.200	0.0200		
			1698.600	0.1200		
			1801.300	0.0900		
			1974.000	0.0600		
166 Lu m1	71	2.120 m	102.380	0.1100	1.0277	0.7658
			228.120	0.0400		
			511.000	0.6960		
			518.000	0.0100		
			1067.320	0.0550		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
166 Lu m1	71	2.120 m	1249.400	0.0150	1.0277	0.7658
			1256.640	0.1500		
			1358.790	0.1320		
			1427.180	0.2260		
			1477.500	0.0270		
			1529.730	0.1090		
			1579.400	0.0100		
			1820.400	0.0090		
			1923.000	0.0240		
			1996.250	0.0330		
			2098.600	0.1590		
			2324.500	0.0930		
			2425.900	0.0060		
166 Lu	71	2.650 m	67.570	0.0390	1.1344	0.8965
			74.920	0.0090		
			93.200	0.0020		
			99.530	0.0045		
			102.380	0.2500		
			139.000	0.0041		
			160.000	0.0024		
			166.600	0.0016		
			191.800	0.0049		
			195.540	0.0085		
			208.650	0.0370		
			212.400	0.0114		
			219.400	0.0033		
			228.120	0.7700		
			248.530	0.0480		
			268.160	0.0081		
			272.200	0.0163		
			274.410	0.0990		
			276.280	0.1360		
			288.870	0.0190		
			294.800	0.0039		
			319.370	0.0075		
			330.900	0.0045		
			337.500	0.4070		
			353.960	0.0054		
			360.090	0.0360		
			367.950	0.3120		
			377.400	0.0037		
			382.970	0.0310		
			386.700	0.0028		
			397.020	0.0147		
			430.280	0.0500		
			442.870	0.0053		
			445.800	0.0022		
			453.860	0.0157		
			467.700	0.0037		
			474.740	0.0273		
			487.200	0.0063		
			490.400	0.0044		
			494.200	0.0024		
			511.000	0.4200		
			523.900	0.0050		
			534.200	0.0053		
			537.640	0.0810		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h./Ci
166 Lu	71	2.650 m	577.700	0.0400	1.1344	0.8965
			625.300	0.0041		
			629.320	0.0700		
			648.100	0.0041		
			659.930	0.0370		
			705.000	0.0053		
			708.820	0.0114		
			714.390	0.0061		
			735.200	0.0037		
			760.900	0.0024		
			794.410	0.0300		
			812.000	0.0122		
			814.460	0.0670		
			832.200	0.0600		
			837.570	0.0273		
			860.560	0.0330		
			901.500	0.0041		
			936.790	0.0570		
			975.000	0.0033		
			997.380	0.1790		
			1021.200	0.0055		
			1056.400	0.0210		
			1060.280	0.0130		
			1067.340	0.0250		
			1122.380	0.0400		
			1144.400	0.0049		
			1151.100	0.0045		
			1165.200	0.0041		
			1174.800	0.0440		
			1185.200	0.0081		
			1186.900	0.0041		
			1197.200	0.0057		
			1201.500	0.0041		
			1234.200	0.0085		
			1240.050	0.0134		
			1261.700	0.0033		
			1290.710	0.0970		
			1301.900	0.0065		
			1306.000	0.0049		
			1310.800	0.0053		
			1349.400	0.0033		
			1354.350	0.0170		
			1398.000	0.0073		
			1459.630	0.0780		
			1487.300	0.0106		
			1497.330	0.0073		
			1505.100	0.0073		
			1582.200	0.0024		
			1630	0.0094		
			1640.300	0.0037		
			1645.400	0.0028		
			1685.850	0.0049		
			1720.300	0.0024		
166 Hf	72	6.770 m	78.760	0.4100	0.1167	0.0999
			93.050	0.0330		
			170.000	0.0045		
			244.600	0.0160		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
166 Hf	72	6.770 m	283.920	0.0160	0.1167	0.0999
			298.770	0.0130		
			306.800	0.0170		
			338.980	0.0120		
			341.820	0.0470		
			355.100	0.0110		
			377.600	0.0400		
			407.910	0.0450		
			430.740	0.0130		
			483.050	0.0410		
			511.000	0.1464		
167 Dy	66	6.200 m	60.440	0.0091	0.2925	0.2352
			72.670	0.0014		
			90.260	0.0043		
			133.190	0.0312		
			150.580	0.0067		
			159.7 ?	0.0048		
			250.0 .	0.0960		
			259.3??	0.2780		
			310.2?0	0.2500		
			352.200	0.0101		
			569.700	0.4800		
			579.400	0.0023		
			599.200	0.0082		
			662.900	0.0034		
			689.400	0.0024		
			707.100	0.0096		
			738.800	0.0058		
			746.000	0.0041		
			799.000	0.0038		
			830.800	0.0034		
			848.300	0.0048		
			909.100	0.0038		
			920.500	0.0024		
			981.400	0.0024		
			997.?00	0.0046		
			1080.300	0.0030		
			1094.600	0.0024		
			1272.900	0.0031		
			1405.600	0.0023		
167 Ho	67	3.100 h	57.100	0.0400	0.2002	0.1805
			73.800	0.0046		
			79.300	0.0220		
			83.500	0.0160		
			131.000	0.0010		
			131.700	0.0010		
			148.300	0.0011		
			207.800	0.0500		
			208.700	0.0017		
			237.900	0.0520		
			254.700	0.0021		
			315.000	0.0074		
			321.300	0.2410		
			332.000	0.0017		
			346.500	0.5730		
			386.200	0.0340		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
167 Ho	67	3.100 h	398.600	0.0092	0.2002	0.1805
			403.000	0.0330		
			430.000	0.0013		
			460.000	0.0210		
			463.000	0.0046		
			480.000	0.0015		
			668.000	0.0023		
			745.000	0.0017		
167 Er	68	2.280 s	207.800	0.4170	0.0457	0.0426
167 Tm	69	9.240 d	57.100	0.0355	0.0510	0.0467
			207.800	0.4100		
			531.500	0.0160		
167 Yb	70	17.500 m	37.050	0.0010	0.0736	0.0746
			62.900	0.0490		
			105.190	0.0059		
			106.160	0.2250		
			113.320	0.5500		
			116.570	0.0282		
			131.990	0.0278		
			143.460	0.0210		
			169.040	0.0016		
			176.230	0.2040		
			177.220	0.0270		
			511.000	0.0100		
			920.320	0.0012		
			1037.070	0.0061		
			1234.630	0.0016		
167 Hf	72	2.050 m	139.900	0.0310	0.4034	0.3346
			175.400	0.0490		
			315.240	0.8120		
			511.000	0.8580		
168 Ho	67	3.000 m	79.800	0.1000	0.4619	0.3398
			99.000	0.0012		
			99.289	0.0029		
			184.281	0.0610		
			198.221	0.0240		
			422.302	0.0022		
			447.461	0.0136		
			546.730	0.0016		
			557.010	0.0066		
			631.670	0.0320		
			645.560	0.0011		
			720.170	0.0076		
			730.580	0.0150		
			741.300	0.3600		
			748.290	0.0013		
			815.900	0.1800		
			821.090	0.3400		
			829.890	0.0020		
			914.860	0.0086		
			1173.500	0.0014		
			1297.270	0.0034		
			1358.990	0.0019		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
168 Ho	67	3.000 m	1371.850	0.0130	0.4619	0.3398
			1603.720	0.0012		
			1651.370	0.0012		
			1768.360	0.0025		
			1835.400	0.0011		
			1848.240	0.0024		
			1850.420	0.0017		
			1930.250	0.0012		
			2345.080	0.0020		
168 Tm	69	93.100 d	79.800	0.1100	0.6043	0.4611
			98.984	0.0062		
			99.289	0.0374		
			184.281	0.1640		
			198.221	0.5000		
			272.870	0.0010		
			348.500	0.0031		
			422.302	0.0027		
			447.461	0.2190		
			546.730	0.0241		
			557.010	0.0019		
			631.670	0.0780		
			645.560	0.0141		
			673.490	0.0013		
			720.170	0.1090		
			730.580	0.0450		
			741.300	0.1130		
			748.290	0.0033		
			815.900	0.4600		
			821.090	0.1110		
			829.890	0.0620		
			914.860	0.0288		
			1277.330	0.0162		
			1461.740	0.0033		
168 Lu	71	5.300 m	111.400	0.1170	0.5558	0.4357
			112.400	0.1190		
			145.000	0.0127		
			156.600	0.1460		
			179.600	0.0840		
			223.600	0.0860		
			228.600	0.2260		
			324.700	0.0740		
			348.300	0.0910		
			374.200	0.0127		
			384.750	0.0336		
			397.200	0.0180		
			401.000	0.0670		
			479.400	0.0240		
			511.000	0.1052		
			539.800	0.1130		
			583.400	0.0700		
			860.000	0.0312		
			1158.500	0.0082		
			1185.000	0.1100		
			1233.500	0.0264		
			1387.500	0.0168		
			1413.500	0.0394		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
168 Lu	71	5.300 m	1483.600	0.1730	0.5558	0.4357
			1525.000	0.0108		
			1533.300	0.0670		
			1686.000	0.0480		
			1712.000	0.0048		
168 Lu m	71	6.700 m	68.000	0.0016	1.1473	0.8539
			87.730	0.1340		
			99.500	0.0240		
			122.800	0.0043		
			131.000	0.0140		
			148.500	0.0140		
			198.820	0.2800		
			246.500	0.0109		
			298.750	0.0260		
			348.300	0.0140		
			371.800	0.0078		
			379.900	0.0062		
			384.750	0.0062		
			384.800	0.0062		
			467.900	0.0109		
			483.000	0.0031		
			511.000	0.2523		
			606.900	0.0125		
			652.300	0.0062		
			697.500	0.0047		
			717.000	0.0031		
			730.300	0.0187		
			752.500	0.0200		
			780.500	0.0370		
			806.000	0.0094		
			853.500	0.0480		
			884.600	0.1400		
			896.000	0.1560		
			902.300	0.0125		
			965.000	0.0078		
			979.200	0.2000		
			983.800	0.1200		
			987.900	0.0156		
			1012.900	0.0109		
			1015.700	0.0187		
			1032.600	0.1090		
			1071.700	0.0370		
			1083.800	0.0550		
			1089.300	0.0125		
			1136.800	0.1250		
			1164.700	0.0109		
			1193.000	0.0078		
			1219.900	0.1080		
			1233.500	0.0330		
			1256.500	0.0140		
			1264.500	0.0300		
			1289.000	0.0031		
			1303.200	0.0047		
			1311.200	0.0109		
			1337.700	0.0420		
			1360.000	0.0047		
			1363.900	0.0390		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R²m2/h/Ci	Γ Rem/h/Ci
168 Lu m	71	6.700 m	1387.500	0.0094	1.1473	0.8539
			1392.000	0.0094		
			1420.800	0.1050		
			1463.500	0.0250		
			1510.000	0.0187		
			1848.600	0.0047		
			1917.500	0.0109		
			1969.500	0.0047		
			2116.000	0.0125		
			2141.400	0.0280		
			2273.000	0.0078		
			2340.000	0.0109		
169 Yb	70	32.010 d	63.119	0.4160	0.1080	0.1056
			93.613	0.0255		
			109.777	0.1740		
			118.187	0.0191		
			130.520	0.1150		
			177.210	0.2230		
			197.953	0.3590		
			240.400	0.0012		
			261.072	0.0168		
			307.730	0.0990		
169 Lu	71	1.419 d	62.750	0.1230	0.5978	0.4552
			70.850	0.2250		
			75.000	0.0034		
			87.400	0.1790		
			90.750	0.0300		
			92.000	0.0170		
			104.350	0.0200		
			110.900	0.0550		
			133.500	0.0064		
			144.600	0.0130		
			156.900	0.0148		
			161.700	0.0010		
			165.000	0.0184		
			166.500	0.0018		
			191.300	0.2220		
			198.400	0.0090		
			226.200	0.0027		
			244.400	0.0047		
			258.400	0.0044		
			291.300	0.0044		
			369.200	0.0100		
			378.600	0.0240		
			404.200	0.0024		
			456.500	0.0064		
			470.400	0.0050		
			480.000	0.0014		
			482.900	0.0023		
			489.000	0.0018		
			511.000	0.0247		
			545.400	0.0036		
			548.500	0.0036		
			560.500	0.0010		
			563.000	0.0030		
			576.400	0.0094		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
169 Lu	71	1.419 d	590.600	0.0062	0.5978	0.4552
			623.000	0.0027		
			635.300	0.0040		
			636.200	0.0023		
			647.200	0.0033		
			655.400	0.0016		
			670.000	0.0024		
			675.900	0.0010		
			690.700	0.0130		
			707.500	0.0050		
			719.800	0.0035		
			728.500	0.0034		
			760.700	0.0090		
			761.700	0.0100		
			820.900	0.0020		
			879.700	0.0054		
			889.500	0.0480		
			920.000	0.0014		
			960.300	0.2370		
			1060.000	0.0175		
			1064.900	0.0033		
			1068.200	0.0080		
			1073.600	0.0067		
			1076.500	0.0010		
			1109.800	0.0020		
			1162.000	0.0020		
			1170.800	0.0068		
			1176.400	0.0020		
			1184.500	0.0214		
			1198.600	0.0013		
			1205.700	0.0060		
			1211.800	0.0047		
			1219.400	0.0040		
			1240.500	0.0033		
			1258.900	0.0053		
			1266.400	0.0013		
			1271.600	0.0079		
			1276.600	0.0027		
			1290.200	0.0100		
			1311.900	0.0026		
			1317.900	0.0013		
			1350.000	0.0017		
			1372.500	0.0017		
			1375.800	0.0067		
			1378.500	0.0290		
			1391.700	0.0162		
			1410.700	0.0019		
			1424.800	0.0014		
			1450.400	0.0940		
			1462.800	0.0130		
			1497.700	0.0017		
			1502.900	0.0017		
			1517.000	0.0029		
			1524.400	0.0014		
			1529.600	0.0062		
			1590.200	0.0050		
			1618.400	0.0053		
			1675.000	0.0047		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
169 Lu	71	1.419 d	1682.000	0.0047	0.5978	0.4552
			1688.700	0.0038		
			1688.700	0.1000		
			1707.300	0.0060		
			1782.000	0.0092		
			1973.900	0.0034		
			1994.900	0.0044		
			2055.800	0.0074		
			2139.700	0.0019		
			2159.200	0.0010		
			2222.500	0.0014		
			2236.600	0.0043		
169 Hf	72	3.250 m	123.600	0.1300	0.3758	0.2934
			369.500	0.1040		
			492.860	0.8960		
			511.000	0.3120		
170 Ho	67	2.800 m	78.700	0.1200	0.7152	0.5304
			181.600	0.2500		
			280.800	0.0240		
			412.900	0.0260		
			477.300	0.0300		
			672.000	0.0310		
			750.300	0.0620		
			843.200	0.0360		
			853.000	0.0410		
			890.000	0.1900		
			931.800	0.3500		
			941.100	0.1800		
			957.000	0.0370		
			1024.700	0.0110		
			1044.100	0.0590		
			1111.600	0.0190		
			1138.500	0.1900		
			1147.800	0.0027		
			1152.900	0.0190		
			1225.800	0.0400		
			1306.900	0.0053		
170 Tm	69	4.060E-06 s	68.000	0.1600	0.0522	0.0543
			76.000	0.0300		
			115.000	0.0770		
			144.000	0.6100		
170 Tm	69	128.600 d	84.257	0.0326	0.0012	0.0013
170 Lu	71	2.000 d	84.262	0.0870	0.9487	0.7001
			152.600	0.0027		
			193.130	0.0207		
			241.500	0.0023		
			283.050	0.0020		
			286.600	0.0045		
			323.570	0.0034		
			395.950	0.0019		
			419.650	0.0050		
			455.500	0.0013		
			492.580	0.0057		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
170 Lu	71	2.000 d	540.150	0.0021	0.9487	0.7001
			544.240	0.0083		
			572.200	0.0125		
			579.400	0.0045		
			688.000	0.0020		
			707.100	0.0013		
			829.300	0.0049		
			839.300	0.0070		
			855.150	0.0096		
			884.100	0.0034		
			926.400	0.0026		
			936.750	0.0158		
			942.450	0.0021		
			947.800	0.0016		
			954.300	0.0022		
			966.850	0.0014		
			970.200	0.0011		
			980.300	0.0013		
			983.670	0.0031		
			985.100	0.0540		
			987.250	0.0166		
			988.500	0.0013		
			999.000	0.0023		
			999.600	0.0152		
			1002.300	0.0013		
			1003.200	0.0345		
			1028.800	0.0081		
			1050.400	0.0099		
			1054.280	0.0460		
			1055.230	0.0022		
			1057.700	0.0021		
			1061.350	0.0022		
			1061.390	0.0211		
			1092.000	0.0019		
			1101.700	0.0095		
			1113.100	0.0010		
			1119.400	0.0018		
			1133.600	0.0103		
			1137.000	0.0016		
			1138.650	0.0349		
			1141.300	0.0051		
			1144.650	0.0167		
			1145.800	0.0175		
			1181.500	0.0045		
			1206.300	0.0013		
			1217.300	0.0020		
			1218.500	0.0136		
			1222.300	0.0064		
			1225.650	0.0480		
			1230.200	0.0011		
			1235.900	0.0023		
			1257.200	0.0137		
			1263.450	0.0031		
			1268.300	0.0012		
			1280.250	0.0790		
			1294.700	0.0284		
			1306.300	0.0049		
			1307.550	0.0108		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
170 Lu	71	2.000 d	1308.000	0.0012	0.9487	0.7001
			1312.900	0.0031		
			1323.000	0.0017		
			1341.200	0.0316		
			1361.100	0.0011		
			1364.600	0.0448		
			1373.500	0.0017		
			1380.800	0.0012		
			1383.600	0.0019		
			1395.000	0.0040		
			1395.650	0.0220		
			1403.790	0.0020		
			1405.150	0.0253		
			1410.300	0.0013		
			1413.200	0.0022		
			1426.720	0.0045		
			1427.270	0.0033		
			1428.080	0.0338		
			1435.400	0.0025		
			1449.640	0.0013		
			1450.200	0.0157		
			1455.250	0.0114		
			1459.850	0.0105		
			1482.150	0.0060		
			1512.500	0.0248		
			1514.600	0.0055		
			1534.550	0.0091		
			1550.550	0.0045		
			1575.100	0.0050		
			1602.200	0.0010		
			1609.400	0.0022		
			1641.300	0.0031		
			1678.600	0.0022		
			1700.900	0.0013		
			1843.300	0.0012		
			1860.300	0.0054		
			1901.350	0.0059		
			1955.650	0.0134		
			2031.700	0.0036		
			2040.000	0.0254		
			2041.880	0.0590		
			2116.000	0.0016		
			2116.600	0.0049		
			2126.110	0.0500		
			2191.150	0.0159		
			2268.100	0.0019		
			2275.400	0.0087		
			2279.900	0.0019		
			2315.900	0.0021		
			2364.100	0.0145		
			2400.150	0.0041		
			2411.900	0.0080		
			2424.400	0.0012		
			2438.600	0.0010		
			2452.700	0.0013		
			2496.150	0.0074		
			2523.000	0.0013		
			2582.900	0.0014		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
170 Lu	71	2.000 d	2561.000	0.0022	0.9487	0.7001
			2663.950	0.0122		
			2691.450	0.0222		
			2698.800	0.0059		
			2748.150	0.0207		
			2775.700	0.0011		
			2783.000	0.0100		
			2845.300	0.0167		
			2849.500	0.0021		
			2855.400	0.0032		
			2929.500	0.0058		
			2939.650	0.0150		
			3036.900	0.0021		
170 Hf	72	16.010 h	39.060	0.0070	0.2623	0.2117
			44.520	0.0032		
			47.800	0.0370		
			54.030	0.0139		
			55.190	0.0142		
			62.800	0.0014		
			70.420	0.0028		
			71.480	0.0028		
			71.580	0.0011		
			74.900	0.0022		
			80.130	0.0078		
			98.550	0.0420		
			99.930	0.0250		
			112.800	0.0011		
			113.900	0.0022		
			115.000	0.0025		
			115.950	0.0081		
			116.900	0.0047		
			117.800	0.0056		
			119.150	0.0106		
			120.190	0.1910		
			146.300	0.0145		
			162.600	0.0173		
			164.710	0.3300		
			168.000	0.0050		
			169.000	0.0075		
			185.400	0.0027		
			187.900	0.0011		
			198.500	0.0017		
			208.100	0.0340		
			209.300	0.0064		
			225.500	0.0109		
			242.800	0.0010		
			257.800	0.0011		
			262.000	0.0011		
			269.000	0.0014		
			278.800	0.0011		
			291.400	0.0134		
			304.100	0.0038		
			308.900	0.0260		
			310.500	0.0012		
			315.400	0.0014		
			349.000	0.0137		
			378.000	0.0016		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
170 Hf	72	16.010 h	425.700	0.0110	0.2623	0.2117
			470.200	0.0067		
			481.300	0.0470		
			501.600	0.0470		
			510.900	0.0021		
			540.700	0.0310		
			572.900	0.1840		
			587.100	0.0033		
			602.200	0.0011		
			608.800	0.0021		
			615.500	0.0047		
			620.700	0.2280		
			669.400	0.0021		
			686.700	0.0033		
			740.800	0.0023		
			746.500	0.0011		
			757.100	0.0051		
			770.200	0.0016		
			801.700	0.0033		
171 Er	68	7.520 h	111.621	0.2100	0.1921	0.1819
			116.656	0.0235		
			124.017	0.0930		
			210.600	0.0066		
			237.140	0.0031		
			277.430	0.0059		
			295.901	0.2950		
			308.291	0.6600		
			371.960	0.0026		
			670.700	0.0026		
			676.100	0.0029		
			784.100	0.0025		
			796.600	0.0065		
			907.700	0.0065		
171 Tm	69	1.921 y	66.718	0.0015	0.0001	0.0001
171 Lu m	71	1.317 m	71.000	0.0020	0.0001	0.0001
171 Lu	71	8.220 d	46.516	0.0320	0.3925	0.3011
			55.679	0.0620		
			66.718	0.3300		
			72.365	0.1900		
			75.872	0.6200		
			85.590	0.0660		
			91.390	0.0230		
			109.270	0.0220		
			163.800	0.0019		
			194.880	0.0021		
			498.700	0.0013		
			517.700	0.0046		
			627.000	0.0089		
			667.290	0.1160		
			689.200	0.0252		
			712.560	0.0123		
			739.670	0.5300		
			767.380	0.0076		
			780.530	0.0470		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
171 Lu	71	8.220 d	825.670	0.0018	0.3925	0.3011
			839.770	0.0340		
			852.830	0.0280		
			902.100	0.0018		
			948.480	0.0012		
			1281.720	0.0036		
172 Er	68	2.054 d	38.690	0.0092	0.3135	0.2490
			56.620	0.0880		
			59.690	0.0540		
			62.520	0.0316		
			68.000	0.3700		
			75.000	0.0022		
			127.800	0.0570		
			164.000	0.0080		
			202.720	0.0117		
			344.820	0.0070		
			383.500	0.0271		
			407.340	0.4500		
			446.000	0.0316		
			475.450	0.0111		
			535.140	0.0031		
			610.000	0.4700		
172 Tm	69	2.650 d	78.750	0.0660	0.2367	0.1759
			90.600	0.0014		
			142.560	0.0022		
			181.520	0.0278		
			399.740	0.0012		
			436.100	0.0025		
			490.420	0.0042		
			528.260	0.0013		
			857.540	0.0014		
			912.000	0.0143		
			964.120	0.0034		
			1039.000	0.0014		
			1076.160	0.0080		
			1093.580	0.0600		
			1119.740	0.0025		
			1155.000	0.0016		
			1205.620	0.0016		
			1288.790	0.0051		
			1348.170	0.0018		
			1387.150	0.0560		
			1398.000	0.0081		
			1402.500	0.0018		
			1465.900	0.0450		
			1470.340	0.0188		
			1476.700	0.0031		
			1529.730	0.0510		
			1584.000	0.0058		
			1608.480	0.0420		
172 Yb	70	3.600E-06 s	78.700	0.1066	0.7492	0.5957
			90.700	0.2500		
			112.700	0.2900		
			174.600	0.6485		
			181.600	0.3634		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
172 Yb	70	3.600E-06 s	197.600	0.0700	0.7492	0.5957
			203.400	0.3023		
			279.700	0.2289		
			723.000	0.0030		
			813.500	0.0200		
			912.800	0.1300		
			1003.500	0.0300		
			1011.000	0.2300		
			1093.200	0.0500		
			1094.400	0.4900		
			1116.200	0.0300		
			1184.000	0.0030		
172 Lu	71	6.700 d	78.670	0.1060	0.9934	0.7407
			90.570	0.0520		
			112.700	0.0450		
			145.720	0.0016		
			181.470	0.1990		
			196.360	0.0012		
			203.370	0.0604		
			247.120	0.0050		
			264.760	0.0065		
			270.000	0.0220		
			279.700	0.0110		
			319.000	0.0017		
			323.890	0.0157		
			330.440	0.0062		
			358.480	0.0012		
			366.680	0.0032		
			372.500	0.0277		
			377.520	0.0318		
			399.750	0.0054		
			410.300	0.0208		
			423.000	0.0017		
			427.570	0.0015		
			432.530	0.0154		
			437.550	0.0024		
			443.420	0.0016		
			482.130	0.0072		
			486.170	0.0074		
			490.400	0.0200		
			512.780	0.0016		
			524.320	0.0024		
			528.230	0.0401		
			536.260	0.0070		
			540.150	0.0134		
			551.190	0.0043		
			566.280	0.0017		
			576.780	0.0036		
			584.600	0.0037		
			594.560	0.0058		
			607.160	0.0065		
			625.600	0.0029		
			630.820	0.0030		
			644.400	0.0024		
			681.760	0.0076		
			697.260	0.0590		
			709.130	0.0072		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
172 Lu	71	6.700 d	723.000	0.0049	0.9934	0.7407
			810.000	0.1600		
			816.340	0.0110		
			900.690	0.2880		
			912.000	0.1470		
			929.000	0.0315		
			967.500	0.0019		
			970.640	0.0010		
			1002.750	0.0526		
			1019.230	0.0017		
			1022.330	0.0148		
			1041.000	0.0038		
			1080.800	0.0114		
			1093.640	0.6360		
			1113.200	0.0188		
			1116.000	0.0020		
			1166.460	0.0014		
			1184.290	0.0049		
			1289.000	0.0015		
			1322.380	0.0015		
			1387.220	0.0080		
			1397.290	0.0034		
			1402.870	0.0061		
			1466.120	0.0066		
			1470.480	0.0060		
			1489.000	0.0110		
			1529.720	0.0014		
			1542.890	0.0096		
			1579.700	0.0020		
			1584.180	0.0253		
			1602.620	0.0029		
			1609.180	0.0010		
			1622.000	0.0213		
			1666.330	0.0017		
			1670.190	0.0055		
			1724.400	0.0043		
			1812.890	0.0018		
			1914.780	0.0058		
			1994.300	0.0016		
			2082.660	0.0030		
			2095.700	0.0011		
172 Hf	72	1.871 y	41.000	0.0034	0.0154	0.0162
			44.000	0.0036		
			67.450	0.0650		
			70.000	0.0108		
			81.750	0.0580		
			114.000	0.0230		
			123.000	0.0336		
			125.860	0.1150		
			128.000	0.0110		
			154.770	0.0011		
172 Ta	73	36.800 m	95.260	0.1740	0.7854	0.5986
			113.900	0.0021		
			214.000	0.5200		
			221.130	0.0119		
			237.630	0.0190		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
172 Ta	73	36.800 m	280.000	0.0016	0.7854	0.5986
			289.290	0.0158		
			318.800	0.0490		
			335.220	0.0068		
			366.140	0.0031		
			379.790	0.0084		
			382.590	0.0042		
			402.000	0.0033		
			406.000	0.0031		
			419.740	0.0016		
			445.000	0.0062		
			458.690	0.0052		
			500.700	0.0073		
			503.000	0.0126		
			511.000	0.5006		
			564.190	0.0059		
			643.260	0.0216		
			653.640	0.0047		
			721.900	0.0052		
			776.000	0.0239		
			820.440	0.0320		
			835.000	0.0047		
			839.000	0.0040		
			843.840	0.0090		
			872.000	0.0140		
			952.250	0.0185		
			980.000	0.0370		
			988.900	0.0023		
			995.520	0.0206		
			1034.390	0.0192		
			1050.000	0.0220		
			1075.300	0.0350		
			1085.580	0.0760		
			1109.300	0.1400		
			1147.170	0.0020		
			1153.850	0.0125		
			1162.470	0.0108		
			1172.770	0.0055		
			1186.540	0.0254		
			1199.800	0.0028		
			1209.860	0.0160		
			1240.490	0.0200		
			1264.160	0.0196		
			1266.000	0.0246		
			1277.620	0.0269		
			1330.400	0.0760		
			1375.220	0.0197		
			1387.000	0.0255		
			1419.770	0.0050		
			1479.570	0.0225		
			1481.630	0.0033		
			1544.600	0.0620		
			1695.580	0.0082		
			2141.200	0.0027		
			2355.000	0.0056		
173 Er	68	1.400 m	94.200	0.0480	0.4351	0.3464
			116.140	0.1900		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
173 Er	68	1.400 m	118.600	0.0250	0.4351	0.3464
			122.400	0.2060		
			192.800	0.4700		
			199.200	0.4800		
			800.800	0.1000		
			895.200	0.5400		
173 Tm	69	8.240 h	62.600	0.0090	0.2188	0.1831
			398.900	0.8770		
			461.400	0.0680		
173 Lu	71	1.371 y	62.150	0.0022	0.0316	0.0295
			78.640	0.0780		
			100.695	0.0312		
			171.350	0.0177		
			179.300	0.0084		
			233.500	0.0035		
			272.010	0.1300		
			285.330	0.0035		
			350.660	0.0019		
			557.300	0.0030		
			635.900	0.0087		
173 Hf	72	24.000 h	123.620	0.8300	0.1771	0.1701
			134.950	0.0460		
			139.570	0.1220		
			161.900	0.0600		
			171.500	0.0012		
			296.900	0.3670		
			306.560	0.0670		
			311.200	0.1120		
			357.000	0.0047		
			511.000	0.0074		
			540.300	0.0037		
			549.900	0.0044		
			718.500	0.0029		
			853.400	0.0032		
			875.000	0.0023		
			879.700	0.0039		
			899.100	0.0099		
			1034.100	0.0042		
			1038.700	0.0032		
			1205.700	0.0030		
173 Ta	73	3.650 h	37.400	0.0124	0.2669	0.2067
			58.000	0.0049		
			69.700	0.0600		
			81.500	0.0147		
			90.100	0.0037		
			90.300	0.0500		
			115.000	0.0038		
			160.400	0.0500		
			172.200	0.1750		
			180.600	0.0220		
			205.400	0.0016		
			246.800	0.0012		
			267.000	0.0033		
			438.300	0.0030		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
173 Ta	73	3.650 h	511.000	0.4482	0.2669	0.2067
			529.800	0.0045		
			549.600	0.0037		
			587.800	0.0020		
			667.700	0.0033		
			685.600	0.0012		
			700.600	0.0120		
			730.600	0.0060		
			739.600	0.0010		
			742.000	0.0010		
			778.200	0.0050		
			799.100	0.0044		
			811.700	0.0040		
			822.800	0.0032		
			846.100	0.0046		
			851.000	0.0012		
			857.600	0.0028		
			864.600	0.0033		
			873.000	0.0070		
			876.600	0.0035		
			888.700	0.0018		
			914.000	0.0028		
			938.700	0.0010		
			942.000	0.0018		
			950.400	0.0024		
			958.600	0.0050		
			995.400	0.0026		
			1006.600	0.0056		
			1030.000	0.0160		
			1045.200	0.0030		
			1085.500	0.0030		
			1127.000	0.0010		
			1178.700	0.0026		
			1208.200	0.0270		
			1253.000	0.0016		
			1343.200	0.0018		
			1368.200	0.0038		
			1380.300	0.0054		
			1393.500	0.0072		
			1405.300	0.0010		
			1413.500	0.0012		
			1425.200	0.0014		
			1432.200	0.0056		
			1492.500	0.0012		
			1574.200	0.0033		
			1585.700	0.0010		
			1597.600	0.0028		
			1613.200	0.0047		
			2001.300	0.0010		
174 Tm	69	5.400 m	76.480	0.1000	0.9807	0.8010
			176.643	1.0700		
			224.235	0.0030		
			273.000	0.9000		
			288.000	0.0140		
			319.500	0.0030		
			363.500	0.0250		
			366.480	0.9600		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
174 Tm	69	5.400 m	443.500	0.0120	0.9807	0.8010
			494.000	0.1050		
			628.400	0.0200		
			860.600	0.0250		
			992.000	0.8400		
			1241.830	0.0140		
			1264.600	0.0250		
			1305.470	0.0060		
174 Lu m	71	142.000 d	44.730	0.1230	0.0135	0.0107
			67.000	0.0743		
			111.800	0.0040		
			126.200	0.0050		
			176.643	0.0070		
			273.000	0.0070		
			992.000	0.0070		
174 Lu	71	3.312 y	76.480	0.0537	0.0406	0.0305
			1241.830	0.0600		
174 Ta	73	72.000 m	91.000	0.1600	0.3139	0.2512
			206.470	0.6420		
			310.840	0.0140		
			454.000	0.0020		
			511.000	0.4731		
			602.900	0.0044		
			764.900	0.0130		
			809.300	0.0080		
			900.400	0.0059		
			971.400	0.0120		
			1096.500	0.0043		
			1136.000	0.0070		
			1151.900	0.0084		
			1205.900	0.0520		
			1227.000	0.0240		
			1303.700	0.0020		
			1359.000	0.0200		
175 Tm	69	15.200 m	104.527	0.0140	0.6415	0.4834
			162.500	0.0040		
			172.166	0.0024		
			295.600	0.0040		
			311.270	0.0070		
			325.300	0.0028		
			363.957	0.1280		
			394.000	0.0330		
			405.147	0.0026		
			423.500	0.0034		
			428.626	0.0010		
			436.159	0.0230		
			477.401	0.0280		
			487.840	0.0072		
			505.030	0.0040		
			514.863	0.8660		
			534.723	0.0200		
			556.090	0.0027		
			577.280	0.0124		
			602.770	0.0013		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
175 Tm	69	15.200 m	625.800	0.0031	0.6415	0.4834
			639.274	0.0610		
			657.320	0.0011		
			670.200	0.0018		
			685.000	0.0011		
			767.130	0.0034		
			800.000	0.0020		
			811.390	0.0430		
			858.260	0.0570		
			871.690	0.0054		
			894.680	0.0780		
			941.150	0.1420		
			948.000	0.0037		
			954.100	0.0180		
			982.100	0.0090		
			982.550	0.0990		
			993.000	0.0037		
			1053.400	0.0014		
			1126.500	0.0034		
			1134.200	0.0028		
			1154.500	0.0034		
			1168.000	0.0013		
			1176.300	0.0031		
			1237.000	0.0028		
			1252.600	0.0023		
			1261.900	0.0027		
			1308.900	0.0043		
			1335.800	0.0047		
			1349.600	0.0011		
			1376.900	0.0300		
			1454.400	0.0013		
			1511.000	0.0011		
			1525.100	0.0126		
			1558.800	0.0017		
			1600.000	0.0017		
175 Yb	70	4.190 d	113.803	0.0191	0.0209	0.0184
			137.656	0.0012		
			144.861	0.0033		
			282.517	0.0310		
			396.322	0.0650		
175 Hf	72	70.000 d	89.360	0.0235	0.1803	0.1629
			113.800	0.0031		
			229.600	0.0076		
			318.900	0.0017		
			343.400	0.8686		
			353.600	0.0023		
			432.800	0.0160		
			432.800	0.0170		
175 Ta	73	10.500 h	50.500	0.0037	0.4283	0.3324
			70.500	0.0017		
			77.300	0.0172		
			81.500	0.0570		
			87.500	0.0012		
			90.000	0.0038		
			100.800	0.0010		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R²m2/h/Ci	Γ Rem/h/Ci
175 Ta	73	10.500 h	104.400	0.0300	0.4263	0.3324
			125.900	0.0250		
			125.900	0.0550		
			126.600	0.0034		
			126.600	0.0027		
			132.000	0.0015		
			140.900	0.0220		
			162.000	0.0080		
			162.500	0.0140		
			162.500	0.0016		
			178.000	0.0027		
			179.100	0.0122		
			185.800	0.0061		
			192.700	0.0035		
			196.400	0.0015		
			207.400	0.1330		
			213.400	0.0010		
			216.400	0.0018		
			230.800	0.0067		
			259.800	0.0049		
			266.900	0.0042		
			266.900	0.1030		
			280.500	0.0065		
			288.900	0.0141		
			294.000	0.0016		
			308.900	0.0016		
			348.500	0.1140		
			361.400	0.0032		
			386.000	0.0061		
			393.200	0.0201		
			436.400	0.0300		
			443.300	0.0015		
			461.900	0.0022		
			475.000	0.0194		
			485.600	0.0013		
			511.000	0.0126		
			525.000	0.0032		
			539.600	0.0091		
			545.200	0.0012		
			561.600	0.0014		
			599.800	0.0022		
			619.400	0.0042		
			701.000	0.0019		
			730.600	0.0049		
			749.500	0.0023		
			789.100	0.0012		
			808.600	0.0061		
			842.700	0.0012		
			849.100	0.0046		
			852.300	0.0011		
			857.700	0.0300		
			866.300	0.0051		
			872.900	0.0030		
			876.400	0.0072		
			893.500	0.0014		
			900.200	0.0065		
			925.200	0.0011		
			947.100	0.0019		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
175 Ta	73	10.500 h	962.100	0.0137	0.4283	0.3324
			967.000	0.0019		
			990.500	0.0046		
			993.800	0.0022		
			998.300	0.0240		
			1019.500	0.0038		
			1035.400	0.0076		
			1061.900	0.0011		
			1087.700	0.0011		
			1091.300	0.0017		
			1095.700	0.0030		
			1118.400	0.0076		
			1120.300	0.0015		
			1124.500	0.0014		
			1144.100	0.0110		
			1174.000	0.0019		
			1205.800	0.0046		
			1208.500	0.0053		
			1212.100	0.0057		
			1225.600	0.0240		
			1249.000	0.0057		
			1249.800	0.0230		
			1259.200	0.0046		
			1261.100	0.0019		
			1271.100	0.0057		
			1282.800	0.0019		
			1293.300	0.0042		
			1348.900	0.0027		
			1386.000	0.0011		
			1399.200	0.0030		
			1446.600	0.0017		
			1451.600	0.0034		
			1462.000	0.0028		
			1465.600	0.0019		
			1468.300	0.0053		
			1483.000	0.0032		
			1490.100	0.0076		
			1506.100	0.0046		
			1525.900	0.0013		
			1560.300	0.0028		
			1577.000	0.0014		
			1581.200	0.0030		
			1586.000	0.0152		
			1611.300	0.0025		
			1616.000	0.0030		
			1618.200	0.0125		
			1631.400	0.0030		
			1636.000	0.0160		
			1659.200	0.0103		
			1680.200	0.0022		
			1686.400	0.0011		
			1707.700	0.0046		
			1711.800	0.0110		
			1721.800	0.0110		
			1736.700	0.0087		
			1744.800	0.0129		
			1793.100	0.0440		
			1811.800	0.0034		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
175 Ta	73	10.500 h	1826.100	0.0118	0.4283	0.3324
			1887.900	0.0036		
176 Tm	69	1.900 m	82.200	0.1200	0.9352	0.7186
			95.900	0.0086		
			101.100	0.0092		
			172.800	0.0096		
			189.800	0.4400		
			215.400	0.0040		
			234.300	0.0320		
			238.400	0.0250		
			239.800	0.0790		
			241.900	0.0110		
			255.200	0.0110		
			289.100	0.0140		
			292.900	0.0350		
			299.600	0.0320		
			305.400	0.0020		
			330.400	0.0860		
			343.500	0.0690		
			347.800	0.0090		
			381.800	0.2300		
			392.100	0.0069		
			410.600	0.0460		
			423.400	0.0082		
			440.900	0.0030		
			449.000	0.0069		
			451.500	0.0120		
			457.100	0.0280		
			482.200	0.0220		
			498.300	0.0092		
			520.200	0.0082		
			539.400	0.0069		
			554.600	0.0049		
			571.500	0.0069		
			621.700	0.0340		
			654.800	0.0059		
			712.100	0.0069		
			754.300	0.0059		
			774.800	0.0110		
			809.200	0.0190		
			852.800	0.0102		
			900.400	0.0260		
			921.500	0.0049		
			1006.200	0.0102		
			1011.500	0.0150		
			1023.200	0.0059		
			1050.000	0.0700		
			1069.200	0.3300		
			1088.200	0.0570		
			1111.100	0.0550		
			1163.600	0.0102		
			1178.700	0.0290		
			1254.100	0.0200		
			1260.900	0.0230		
			1273.200	0.0059		
			1282.400	0.0180		
			1349.500	0.0150		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
176 Tm	69	1.900 m	1353.300	0.0069	0.9352	0.7186
			1358.300	0.0030		
			1493.100	0.0090		
			1521.300	0.0102		
			1589.200	0.0280		
			1612.700	0.0102		
			1748.000	0.0069		
			1756.100	0.0049		
			1845.000	0.0069		
			1881.200	0.0049		
			1970.800	0.0240		
			2070.800	0.0049		
			2265.500	0.0049		
			2456.000	0.0092		
			2614.100	0.0092		
			2621.300	0.0290		
			2677.700	0.0092		
			2682.000	0.0130		
			2780.700	0.0059		
			2868.100	0.0180		
			2871.900	0.0210		
			2914.500	0.0430		
176 Yb	70	11.400 s	82.100	0.1400	0.4714	0.4338
			96.100	0.7300		
			190.100	0.8200		
			292.900	0.9300		
			389.700	0.9100		
176 Lu m	71	3.680 h	88.361	0.0880	0.0034	0.0038
176 Lu	71	3.602E+10 y	88.350	0.1300	0.2559	0.2422
			201.820	0.8400		
			306.880	0.9300		
			401.100	0.0080		
176 Ta	73	8.080 h	88.350	0.1140	0.8935	0.6615
			125.400	0.0021		
			146.740	0.0020		
			156.840	0.0034		
			158.190	0.0022		
			175.500	0.0041		
			190.360	0.0040		
			201.840	0.0550		
			213.500	0.0041		
			216.000	0.0011		
			239.620	0.0052		
			346.900	0.0011		
			380.480	0.0013		
			466.160	0.0107		
			507.790	0.0139		
			512.300	0.0038		
			519.700	0.0031		
			521.300	0.0026		
			521.600	0.0230		
			532.540	0.0023		
			546.530	0.0051		
			560.770	0.0011		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
176 Ta	73	8.080 h	571.300	0.0025	0.8935	0.6615
			611.160	0.0122		
			616.790	0.0097		
			638.830	0.0019		
			644.860	0.0096		
			685.550	0.0011		
			710.500	0.0520		
			723.100	0.0013		
			740.970	0.0013		
			819.490	0.0025		
			820.000	0.0086		
			880.000	0.0069		
			923.940	0.0070		
			936.420	0.0054		
			957.400	0.0055		
			967.060	0.0013		
			1017.580	0.0011		
			1023.100	0.0260		
			1051.030	0.0010		
			1061.610	0.0052		
			1066.200	0.0062		
			1089.060	0.0019		
			1125.450	0.0014		
			1138.260	0.0066		
			1155.500	0.0062		
			1157.410	0.0330		
			1159.300	0.2400		
			1174.170	0.0020		
			1184.550	0.0010		
			1190.220	0.0440		
			1204.850	0.0032		
			1213.200	0.0014		
			1222.950	0.0190		
			1224.960	0.0550		
			1226.850	0.0035		
			1247.680	0.0044		
			1252.900	0.0300		
			1268.780	0.0128		
			1277.900	0.0015		
			1291.010	0.0128		
			1341.330	0.0320		
			1357.520	0.0190		
			1371.750	0.0015		
			1420.040	0.0044		
			1450.400	0.0035		
			1476.180	0.0046		
			1489.330	0.0070		
			1495.850	0.0018		
			1503.700	0.0010		
			1504.240	0.0073		
			1536.620	0.0037		
			1540.820	0.0034		
			1543.730	0.0024		
			1555.050	0.0390		
			1563.530	0.0019		
			1564.950	0.0040		
			1584.020	0.0510		
			1612.630	0.0017		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
176 Ta	73	8.080 h	1616.180	0.0124	0.8935	0.6615
			1628.500	0.0013		
			1633.740	0.0280		
			1643.450	0.0230		
			1659.210	0.0010		
			1672.320	0.0114		
			1679.180	0.0116		
			1693.700	0.0050		
			1697.800	0.0031		
			1704.700	0.0135		
			1705.400	0.0016		
			1722.040	0.0320		
			1745.290	0.0011		
			1765.750	0.0046		
			1768.220	0.0018		
			1774.560	0.0150		
			1793.170	0.0019		
			1823.700	0.0430		
			1836.340	0.0021		
			1861.150	0.0025		
			1862.740	0.0380		
			1949.800	0.0012		
			1956.480	0.0083		
			1977.850	0.0084		
			2044.870	0.0130		
			2192.330	0.0022		
			2219.490	0.0028		
			2246.920	0.0013		
			2280.600	0.0017		
			2307.700	0.0019		
			2317.000	0.0024		
			2361.500	0.0020		
			2394.600	0.0012		
			2405.200	0.0047		
			2513.820	0.0064		
			2602.150	0.0034		
			2674.200	0.0018		
			2773.800	0.0011		
			2832.000	0.0420		
			2885.550	0.0010		
			2920.410	0.0210		
176 W	74	2.300 h	50.500	0.0064	0.0387	0.0422
			61.300	0.0670		
			84.000	0.0340		
			94.800	0.0683		
			100.200	0.7300		
176 Pt	78	6.330 s	226.000	0.0048	0.0006	0.0005
177 Yb m	70	6.410 s	104.500	0.7651	0.0502	0.0522
			227.000	0.1230		
177 Yb	70	1.900 h	121.620	0.0340	0.0945	0.0744
			138.606	0.0133		
			147.165	0.0018		
			150.392	0.2000		
			268.801	0.0017		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
177 Yb	70	1.900 h	779.300	0.0012	0.0945	0.0744
			899.200	0.0064		
			941.700	0.0101		
			1028.000	0.0063		
			1080.100	0.0550		
			1109.000	0.0018		
			1119.600	0.0054		
			1149.700	0.0064		
			1230.700	0.0037		
			1241.400	0.0340		
177 Lu	71	6.710 d	71.646	0.0015	0.0160	0.0154
			112.952	0.0640		
			208.359	0.1100		
			249.686	0.0021		
			321.330	0.0022		
177 Lu m	71	160.900 d	55.150	0.0120	0.4993	0.4551
			71.646	0.0088		
			105.360	0.1220		
			112.952	0.2180		
			115.830	0.0061		
			117.010	0.0024		
			121.620	0.0600		
			128.480	0.1550		
			136.730	0.0139		
			145.590	0.0094		
			147.165	0.0370		
			153.250	0.1820		
			159.920	0.0061		
			171.868	0.0500		
			174.370	0.1280		
			177.050	0.0340		
			195.562	0.0090		
			204.060	0.1450		
			208.359	0.6200		
			214.450	0.0670		
			218.097	0.0300		
			228.440	0.3800		
			233.830	0.0570		
			249.686	0.0620		
			268.801	0.0340		
			281.780	0.1420		
			283.420	0.0035		
			291.420	0.0102		
			292.510	0.0082		
			296.450	0.0550		
			299.030	0.0153		
			305.520	0.0173		
			313.690	0.0129		
			319.040	0.1000		
			321.330	0.0107		
			327.660	0.1780		
			341.640	0.0181		
			367.440	0.0300		
			378.510	0.2800		
			385.020	0.0300		
			413.700	0.1700		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
177 Lu m	71	160.900 d	418.510	0.2030	0.4993	0.4551
			426.290	0.0041		
			465.960	0.0240		
177 Hf m2	72	1.080 s	71.646	0.0102	0.5316	0.4869
			105.360	0.1520		
			112.952	0.2700		
			117.010	0.0021		
			128.480	0.1980		
			136.730	0.0180		
			145.590	0.0131		
			153.250	0.2200		
			174.370	0.1660		
			177.050	0.0460		
			204.060	0.1960		
			208.359	0.8000		
			214.450	0.0840		
			228.440	0.4800		
			233.830	0.0710		
			249.686	0.0810		
			281.780	0.1850		
			283.420	0.0046		
			291.420	0.0140		
			292.510	0.0109		
			296.450	0.0680		
			299.030	0.0230		
			305.520	0.0230		
			313.690	0.0146		
			321.330	0.0240		
			327.660	0.2220		
			341.640	0.0270		
			378.510	0.3600		
			385.020	0.0400		
			418.510	0.2600		
			426.290	0.0059		
			465.960	0.0280		
177 Hf m1	72	51.400 m	120.500	0.0094	0.6306	0.5646
			214.000	0.4000		
			254.800	0.0132		
			277.300	0.7500		
			295.000	0.6800		
			311.500	0.5800		
			326.700	0.6400		
			572.400	0.0700		
			606.500	0.1140		
			638.200	0.1980		
177 Ta	73	2.358 d	112.952	0.0720	0.0074	0.0069
			208.359	0.0093		
			424.600	0.0010		
			745.900	0.0020		
			1057.800	0.0029		
177 W	74	2.250 h	70.450	0.0630	0.4393	0.3500
			73.150	0.0022		
			101.750	0.0047		
			115.050	0.0850		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
177 W	74	2.250 h	115.650	0.5000	0.4393	0.3500
			142.600	0.0135		
			149.160	0.0055		
			152.230	0.0019		
			155.950	0.0390		
			159.100	0.0013		
			172.500	0.0013		
			186.200	0.0840		
			186.420	0.0770		
			215.300	0.0013		
			223.230	0.0220		
			224.990	0.0058		
			237.700	0.0018		
			259.250	0.0092		
			271.020	0.0394		
			277.850	0.0035		
			280.800	0.0087		
			304.300	0.0019		
			305.850	0.0056		
			308.250	0.0092		
			311.280	0.0137		
			316.300	0.0010		
			317.750	0.0056		
			367.520	0.0420		
			377.350	0.0460		
			382.300	0.0068		
			388.800	0.0167		
			417.160	0.0610		
			418.350	0.0087		
			424.000	0.0090		
			426.980	0.1310		
			431.450	0.0076		
			436.600	0.0053		
			450.600	0.0129		
			457.200	0.0027		
			467.500	0.0071		
			473.500	0.0129		
			497.700	0.0013		
			502.400	0.0080		
			504.200	0.0013		
			511.000	0.0041		
			528.500	0.0236		
			563.000	0.0014		
			568.100	0.0080		
			577.700	0.0024		
			611.800	0.0590		
			619.400	0.0030		
			642.300	0.0016		
			647.300	0.0254		
			672.150	0.0195		
			678.500	0.0056		
			694.700	0.0021		
			707.000	0.0018		
			711.200	0.0026		
			714.000	0.0018		
			721.600	0.0117		
			755.000	0.0014		
			759.000	0.0056		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
177 W	74	2.250 h	771.500	0.0014	0.4393	0.3500
			785.900	0.0103		
			793.600	0.0058		
			822.000	0.0011		
			827.900	0.0103		
			836.200	0.0101		
			858.400	0.0069		
			877.200	0.0121		
			880.200	0.0121		
			889.500	0.0018		
			903.500	0.0039		
			939.200	0.0076		
			978.800	0.0034		
			990.200	0.0080		
			1000.000	0.0053		
			1004.700	0.0037		
			1014.900	0.0477		
			1036.400	0.1020		
			1045.900	0.0042		
			1052.500	0.0018		
			1055.800	0.0064		
			1066.900	0.0309		
			1082.900	0.0014		
			1090.100	0.0016		
			1103.700	0.0027		
			1115.200	0.0013		
			1140.500	0.0079		
			1166.800	0.0013		
			1170.900	0.0053		
			1182.500	0.0370		
			1220.100	0.0021		
			1245.600	0.0014		
			1253.700	0.0014		
			1259.700	0.0013		
			1276.300	0.0013		
			1296.100	0.0048		
			1301.800	0.0024		
			1326.800	0.0053		
			1357.500	0.0018		
			1406.100	0.0027		
177 Re	75	14.000 m	33.900	0.0040	0.2836	0.2183
			76.100	0.0250		
			79.650	0.0710		
			84.300	0.0630		
			94.900	0.0390		
			101.400	0.0300		
			181.600	0.0190		
			196.850	0.0840		
			209.800	0.0280		
			511.000	0.4446		
			600.200	0.0170		
			708.100	0.0250		
			723.400	0.0210		
			1118.400	0.0130		
			1196.500	0.0130		
			1551.700	0.0060		
			1770.500	0.0220		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
177 Re	75	14.000 m	1861.100	0.0080	0.2836	0.2183
			1886.100	0.0080		
			1911.200	0.0130		
			1944.900	0.0070		
			1964.600	0.0290		
			1986.100	0.0100		
178 Yb	70	1.233 h	42.400	0.0036	0.0191	0.0165
			348.400	0.0346		
			390.800	0.0540		
178 Lu m	71	22.700 m	88.500	0.6300	0.5910	0.5264
			93.200	0.1763		
			213.500	1.0300		
			325.300	0.9700		
			331.500	0.1300		
			426.200	0.9800		
178 Lu	71	28.400 m	93.200	0.0660	0.0673	0.0507
			151.300	0.0034		
			203.800	0.0019		
			213.500	0.0020		
			1216.800	0.0020		
			1255.000	0.0015		
			1269.200	0.0102		
			1309.900	0.0150		
			1340.800	0.0460		
			1403.200	0.0063		
			1420.700	0.0016		
			1468.300	0.0011		
			1496.000	0.0038		
			1513.700	0.0019		
			1678.800	0.0035		
178 Hf	72	31.021 y	88.880	0.6400	1.3038	1.0792
			93.180	0.1710		
			213.440	0.8200		
			216.670	0.6800		
			237.400	0.0980		
			257.620	0.1710		
			277.350	0.0150		
			296.800	0.0960		
			325.560	0.9500		
			426.370	1.0000		
			454.000	0.1800		
			495.000	0.7900		
			535.000	0.1050		
			574.200	0.9700		
178 Ta m	73	9.310 m	93.130	0.0650	0.0262	0.0203
			1106.100	0.0053		
			1340.840	0.0102		
			1350.550	0.0117		
			1402.870	0.0048		
			1496.000	0.0027		
178 Ta	73	2.200 h	88.800	0.6700	0.5189	0.4646
			93.140	0.1742		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
178 Ta	73	2.200 h	213.700	0.7948	0.5189	0.4646
			325.800	0.8470		
			331.900	0.2357		
			426.800	0.7967		
178 Re	75	13.200 m	105.900	0.2300	0.5680	0.4361
			181.000	0.0062		
			237.300	0.4500		
			351.900	0.0260		
			511.000	0.6468		
			684.000	0.0087		
			740.000	0.0029		
			767.700	0.0048		
			777.900	0.0380		
			882.800	0.0096		
			939.000	0.0890		
			976.600	0.0360		
			1004.400	0.0058		
			1037.500	0.0100		
			1106.500	0.0058		
			1110.800	0.0270		
			1169.500	0.0077		
			1255.300	0.0140		
			1275.600	0.0106		
			1342.500	0.0050		
			1450.000	0.0110		
			1492.300	0.0140		
			1521.400	0.0038		
			1758.200	0.0067		
			2036.500	0.0029		
			2247.800	0.0019		
			2287.000	0.0029		
			2324.600	0.0019		
			2468.000	0.0019		
			2957.600	0.0087		
			3011.800	0.0014		
			3025.000	0.0043		
			3112.300	0.0029		
			3116.300	0.0029		
			3156.800	0.0058		
			3168.600	0.0087		
			3172.200	0.0032		
			3196.000	0.0026		
			3208.500	0.0070		
			3237.600	0.0030		
			3242.900	0.0027		
			3251.500	0.0039		
			3263.600	0.0039		
			3277.400	0.0038		
			3291.600	0.0022		
			3363.600	0.0019		
			3369.500	0.0015		
			3383.300	0.0013		
			3392.900	0.0017		
			3399.400	0.0033		
			3406.000	0.0046		
			3409.000	0.0017		
			3445.200	0.0090		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
178 Re	75	13.200 m	3528.700	0.0020	0.5680	0.4361
179 Lu	71	4.590 h	122.800	0.0046	0.0164	0.0152
			123.400	0.0140		
			214.300	0.1230		
			215.000	0.0050		
			337.700	0.0019		
			859.200	0.0010		
179 Hf m1	72	18.680 s	160.700	0.0278	0.1103	0.1021
			214.000	0.9524		
179 Hf m2	72	25.100 d	122.700	0.2713	0.5031	0.4410
			146.100	0.2718		
			169.760	0.3600		
			192.600	0.3400		
			217.000	0.1260		
			236.380	0.2500		
			257.320	0.0316		
			268.800	0.1100		
			315.850	0.1965		
			362.490	0.3824		
			409.630	0.2130		
			453.490	0.6634		
179 W m	74	6.700 m	120.000	0.0090	0.0114	0.0105
			221.500	0.0863		
			238.700	0.0029		
			281.700	0.0020		
179 W	74	37.500 m	30.700	0.3600	0.0282	0.0058
			133.900	0.0040		
180 Lu	71	5.700 m	69.000	0.0350	0.8430	0.6549
			93.300	0.7500		
			135.000	0.0410		
			198.300	0.0250		
			215.240	0.2500		
			235.000	0.0123		
			316.600	0.1470		
			333.000	0.0100		
			408.000	0.4900		
			424.400	0.0128		
			451.600	0.0118		
			891.000	0.0069		
			982.600	0.0220		
			1066.000	0.0140		
			1089.900	0.0113		
			1100.900	0.0170		
			1106.400	0.2300		
			1198.000	0.1490		
			1199.600	0.2500		
			1230.800	0.0050		
			1282.500	0.0050		
			1299.200	0.1400		
			1316.000	0.0089		
			1434.000	0.0200		
			1446.000	0.0070		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
180 Lu	71	5.700 m	1514.300	0.0780	0.8430	0.6549
			1874.500	0.0069		
			1888.500	0.0118		
180 Hf	72	5.500 h	57.549	0.6651	0.5547	0.4805
			93.332	0.1751		
			215.250	0.8200		
			332.300	0.9440		
			443.180	0.8500		
			500.714	0.1280		
180 Ta	73	8.100 h	93.000	0.0468	0.0022	0.0025
			103.000	0.0070		
180 W	74	0.006 s	103.800	0.2262	0.7793	0.6656
			233.900	0.8428		
			351.000	0.9486		
			390.700	0.9878		
			450.400	0.9732		
180 Re	75	2.430 m	76.500	0.0050	0.6223	0.4585
			103.800	0.2240		
			234.800	0.0051		
			511.000	0.1736		
			669.300	0.0080		
			744.900	0.0070		
			749.000	0.0140		
			824.900	0.1160		
			902.400	0.9800		
			978.900	0.0010		
			1005.800	0.0059		
180 Os	76	22.000 m	511.000	0.0183	0.0054	0.0041
181 Hf	72	42.400 d	133.020	0.4300	0.3001	0.2452
			136.250	0.0610		
			136.860	0.0180		
			345.850	0.1400		
			476.000	0.0043		
			482.000	0.8600		
			615.500	0.0025		
181 Re	75	20.000 h	43.500	0.0052	0.3815	0.3057
			65.000	0.0256		
			71.700	0.0016		
			72.700	0.0017		
			93.700	0.0012		
			102.700	0.0026		
			103.000	0.0026		
			109.900	0.0240		
			110.300	0.0100		
			113.300	0.0050		
			144.300	0.0036		
			154.400	0.0018		
			163.900	0.0012		
			164.600	0.0012		
			165.800	0.0012		
			167.200	0.0010		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R²m2/h/Ci	Γ Rem/h/Ci
181 Re	75	20.000 h	175.200	0.0028	0.3815	0.3057
			177.500	0.0174		
			186.200	0.0015		
			193.000	0.0018		
			197.000	0.0054		
			237.400	0.0010		
			252.200	0.0098		
			262.600	0.0022		
			276.400	0.0064		
			278.000	0.0016		
			296.000	0.0020		
			318.600	0.0110		
			331.900	0.0133		
			353.600	0.0100		
			356.000	0.0170		
			360.700	0.1200		
			365.500	0.5700		
			382.300	0.0027		
			398.000	0.0065		
			409.000	0.0025		
			412.300	0.0100		
			441.800	0.0100		
			441.800	0.0045		
			475.600	0.0100		
			487.000	0.0070		
			489.000	0.0074		
			515.700	0.0016		
			522.000	0.0023		
			524.400	0.0020		
			544.800	0.0030		
			557.800	0.0215		
			570.000	0.0046		
			587.400	0.0070		
			628.800	0.0013		
			632.700	0.0016		
			639.000	0.0645		
			643.900	0.0057		
			651.200	0.0100		
			659.200	0.0023		
			661.800	0.0300		
			668.200	0.0030		
			693.900	0.0025		
			699.900	0.0013		
			738.000	0.0030		
			769.700	0.0015		
			803.600	0.0146		
			805.200	0.0312		
			817.500	0.0013		
			822.700	0.0016		
			835.700	0.0046		
			840.400	0.0028		
			848.500	0.0013		
			854.400	0.0018		
			862.700	0.0018		
			877.200	0.0048		
			879.800	0.0052		
			883.200	0.0026		
			889.500	0.0012		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
181 Re	75	20.000 h	907.400	0.0100	0.3815	0.3057
			946.900	0.0022		
			953.600	0.0356		
			965.000	0.0020		
			973.200	0.0013		
			980.700	0.0018		
			989.400	0.0090		
			993.700	0.0030		
			1000.200	0.0333		
			1009.400	0.0245		
			1018.600	0.0013		
			1057.000	0.0030		
			1075.600	0.0100		
			1086.600	0.0056		
			1103.500	0.0070		
			1132.300	0.0022		
			1272.500	0.0010		
			1384.200	0.0023		
			1440.700	0.0200		
			1469.200	0.0082		
			1538.000	0.0020		
181 Os m	76	2.700 m	118.010	0.2500	0.1265	0.1169
			145.020	0.8700		
			511.000	0.1800		
181 Os	76	1.750 h	75.730	0.0280	0.6117	0.4662
			100.000	0.0033		
			104.500	0.0035		
			118.010	0.1390		
			145.020	0.0150		
			148.400	0.0022		
			167.230	0.0330		
			228.730	0.0170		
			233.630	0.0200		
			238.750	0.4800		
			242.740	0.0650		
			267.650	0.0108		
			310.500	0.0039		
			324.400	0.0030		
			326.400	0.0052		
			334.000	0.0022		
			344.200	0.0039		
			356.700	0.0170		
			434.500	0.0210		
			509.000	0.0022		
			511.000	0.0520		
			567.200	0.0087		
			592.000	0.0080		
			675.400	0.0170		
			728.600	0.0110		
			751.400	0.0434		
			759.500	0.0260		
			786.000	0.0080		
			787.600	0.0560		
			796.900	0.0130		
			827.000	0.2170		
			831.500	0.0820		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
181 Os	76	1.750 h	835.000	0.0022	0.6117	0.4662
			842.500	0.0089		
			920.300	0.0140		
			931.700	0.0089		
			941.500	0.0110		
			955.000	0.0434		
			955.000	0.0108		
			981.000	0.0090		
			1000.500	0.0056		
			1009.400	0.0090		
			1027.000	0.0033		
			1030.500	0.0180		
			1060.400	0.0610		
			1064.000	0.0030		
			1077.300	0.0040		
			1086.200	0.0140		
			1110.900	0.0230		
			1131.700	0.0078		
			1159.000	0.0056		
			1260.000	0.0028		
			1305.000	0.0200		
			1325.000	0.0043		
			1345.200	0.0120		
			1434.300	0.0056		
			1442.000	0.0070		
			1491.800	0.0110		
			1514.000	0.0017		
			1537.500	0.0028		
			1552.000	0.0015		
			1568.000	0.0110		
			1573.000	0.0120		
			1589.500	0.0072		
			1704.900	0.0150		
			1740.600	0.0135		
			1760.700	0.0095		
			1780.700	0.0043		
			1826.200	0.0017		
			1937.000	0.0022		
			1946.000	0.0065		
			1993.300	0.0020		
			2000.400	0.0020		
			2015.000	0.0020		
			2138.000	0.0082		
			2436.200	0.0011		
182 Hf m	72	61.500 m	50.900	0.1340	0.4978	0.4050
			59.100	0.0460		
			75.800	0.0130		
			97.800	0.0430		
			97.800	0.0920		
			114.300	0.0650		
			132.800	0.0310		
			143.200	0.0450		
			146.800	0.0500		
			171.600	0.0400		
			173.400	0.0290		
			178.700	0.0230		
			185.000	0.0230		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
182 Hf m	72	61.500 m	195.800	0.0110	0.4978	0.4050
			220.800	0.0100		
			224.400	0.3800		
			318.400	0.0059		
			339.600	0.0590		
			344.100	0.4600		
			455.800	0.2030		
			506.600	0.2380		
			603.200	0.0550		
			613.300	0.0120		
			627.600	0.0110		
			799.700	0.0990		
			823.100	0.0280		
			942.800	0.2000		
			952.900	0.0026		
182 Hf	72	9.006E+06 y	114.330	0.0260	0.1265	0.1183
			156.090	0.0700		
			172.540	0.0020		
			270.405	0.8000		
182 Ta m	73	15.840 m	146.785	0.3480	0.0975	0.0960
			171.586	0.4570		
			184.951	0.2290		
			318.400	0.0640		
			356.470	0.0027		
182 Ta	73	115.000 d	31.737	0.0063	0.6679	0.5035
			42.714	0.0024		
			65.722	0.0279		
			67.750	0.4120		
			84.681	0.0265		
			100.106	0.1400		
			113.667	0.0192		
			116.415	0.0044		
			152.428	0.0715		
			156.382	0.0272		
			179.390	0.0314		
			198.348	0.0154		
			222.101	0.0754		
			229.316	0.0363		
			264.071	0.0363		
			927.990	0.0062		
			959.740	0.0036		
			1001.680	0.0209		
			1044.430	0.0024		
			1113.380	0.0039		
			1121.280	0.3490		
			1157.500	0.0035		
			1157.500	0.0064		
			1189.040	0.1640		
			1221.418	0.2730		
			1223.200	0.0021		
			1230.970	0.1155		
			1257.470	0.0151		
			1273.750	0.0066		
			1289.170	0.0141		
			1342.720	0.0026		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
182 Ta	73	115.000 d	1373.800	0.0023	0.6679	0.5035
182 W	74	1.400E-06 s	100.000	0.2020	1.1566	0.9194
			229.300	0.8340		
			351.000	0.9490		
			464.000	0.9750		
			518.500	0.4940		
			567.600	0.5120		
			1086.100	0.4800		
182 Re m	75	12.700 h	31.700	0.0057	0.5747	0.4305
			42.700	0.0019		
			65.800	0.0020		
			67.850	0.3780		
			84.700	0.0264		
			100.100	0.1430		
			113.700	0.0041		
			116.400	0.0035		
			152.500	0.0670		
			156.400	0.0041		
			179.400	0.0024		
			198.400	0.0018		
			222.000	0.0067		
			229.300	0.0210		
			264.000	0.0026		
			470.260	0.0197		
			511.000	0.0036		
			536.000	0.0021		
			555.000	0.0011		
			598.560	0.0040		
			649.730	0.0035		
			734.530	0.0038		
			787.100	0.0025		
			800.000	0.0015		
			810.240	0.0038		
			836.000	0.0048		
			894.850	0.0210		
			900.800	0.0035		
			928.000	0.0051		
			959.800	0.0038		
			1001.800	0.0022		
			1044.500	0.0018		
			1121.400	0.3180		
			1157.300	0.0070		
			1180.900	0.0022		
			1189.200	0.1510		
			1221.500	0.2500		
			1231.000	0.0130		
			1257.300	0.0140		
			1273.800	0.0054		
			1289.300	0.0121		
			1294.200	0.0017		
			1374.000	0.0019		
			1771.000	0.0029		
			1818.800	0.0011		
			1870.900	0.0029		
			1957.300	0.0046		
			2016.200	0.0078		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
182 Re m	75	12.700 h	2047.300	0.0012	0.5747	0.4305
			2057.400	0.0083		
			2207.700	0.0010		
182 Re	75	2.667 d	31.740	0.0036	0.9323	0.7377
			39.100	0.0048		
			42.710	0.0018		
			65.720	0.0310		
			67.750	0.2400		
			84.680	0.0310		
			100.120	0.1600		
			107.150	0.0126		
			108.550	0.0074		
			113.700	0.0470		
			116.400	0.0033		
			130.800	0.0770		
			131.320	0.0017		
			133.770	0.0260		
			145.400	0.0074		
			147.620	0.0074		
			148.820	0.0160		
			149.440	0.0083		
			151.130	0.0067		
			152.430	0.0540		
			153.950	0.0034		
			156.380	0.0800		
			169.170	0.1260		
			172.880	0.0370		
			178.440	0.0240		
			179.380	0.0350		
			191.360	0.0830		
			198.360	0.0440		
			203.330	0.0048		
			205.950	0.0053		
			209.420	0.0120		
			214.300	0.0140		
			215.720	0.0067		
			217.520	0.0430		
			221.620	0.0970		
			222.080	0.0780		
			226.170	0.0350		
			229.320	0.2900		
			247.450	0.0550		
			256.430	0.1080		
			264.080	0.0400		
			276.280	0.0970		
			281.420	0.0620		
			286.580	0.0810		
			300.000	0.0220		
			300.480	0.0126		
			313.900	0.0064		
			323.440	0.0200		
			339.070	0.0600		
			342.040	0.0100		
			345.400	0.0034		
			351.070	0.1110		
			357.120	0.0055		
			927.990	0.0037		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
182 Re	75	2.667 d	943.010	0.0023	0.9323	0.7377
			959.800	0.0021		
			1001.800	0.0260		
			1044.500	0.0030		
			1076.300	0.1100		
			1088.200	0.0021		
			1113.600	0.0490		
			1121.400	0.2300		
			1157.300	0.0041		
			1158.100	0.0092		
			1180.900	0.0059		
			1189.200	0.0940		
			1221.500	0.1800		
			1223.900	0.0020		
			1231.100	0.1600		
			1257.300	0.0108		
			1273.800	0.0092		
			1289.300	0.0079		
			1292.000	0.0024		
			1294.200	0.0170		
			1331.000	0.0038		
			1342.800	0.0290		
			1373.900	0.0031		
			1387.400	0.0024		
			1410.200	0.0030		
			1427.300	0.1020		
			1439.400	0.0014		
182 Os	76	22.000 h	55.560	0.0590	0.2119	0.1722
			110.460	0.0023		
			115.940	0.0065		
			122.300	0.0041		
			130.840	0.0330		
			136.900	0.0010		
			170.440	0.0021		
			172.430	0.0035		
			175.030	0.0032		
			180.220	0.3500		
			190.000	0.0010		
			216.920	0.0075		
			223.000	0.0010		
			235.760	0.0041		
			241.370	0.0088		
			246.780	0.0059		
			263.340	0.0660		
			274.340	0.0171		
			373.200	0.0036		
			379.200	0.0078		
			454.590	0.0029		
			498.900	0.0034		
			509.990	0.5180		
			554.700	0.0031		
			560.800	0.0013		
			727.600	0.0014		
182 Ir	77	15.000 m	127.300	0.3400	0.6905	0.5406
			136.200	0.0047		
			142.600	0.0095		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
182 Ir	77	15.000 m	154.700	0.0073	0.6905	0.5406
			166.000	0.0064		
			179.800	0.0120		
			197.200	0.0043		
			228.200	0.0064		
			236.300	0.0900		
			252.000	0.0086		
			264.800	0.0056		
			273.000	0.4300		
			281.500	0.0047		
			289.000	0.0110		
			295.300	0.0110		
			306.800	0.0030		
			335.800	0.0120		
			343.200	0.0034		
			351.600	0.0030		
			393.100	0.0320		
			397.000	0.0100		
			400.000	0.0310		
			405.000	0.0034		
			415.500	0.0056		
			430.000	0.0120		
			432.700	0.0095		
			464.700	0.0026		
			483.700	0.0052		
			492.000	0.0017		
			498.000	0.0047		
			511.000	0.8806		
			545.500	0.0030		
			549.200	0.0034		
			559.000	0.0017		
			581.000	0.0064		
			602.300	0.0043		
			632.000	0.0086		
			638.500	0.0099		
			647.000	0.0077		
			690.200	0.0034		
			747.100	0.0039		
			749.200	0.0043		
			764.300	0.0560		
			779.900	0.0069		
			790.100	0.0310		
			837.800	0.0043		
			890.900	0.0570		
			912.300	0.0870		
			932.500	0.0039		
			938.900	0.0150		
			953.000	0.0060		
			977.100	0.0060		
			999.100	0.0150		
			1032.900	0.0086		
			1063.300	0.0220		
			1111.000	0.0047		
			1118.000	0.0250		
			1121.400	0.0043		
			1130.300	0.0056		
			1158.000	0.0110		
			1160.000	0.0140		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
182 Ir	77	15.000 m	1218.000	0.0140	0.6905	0.5406
			1227.000	0.0056		
			1251.600	0.0190		
			1266.200	0.0150		
			1375.000	0.0100		
			1546.000	0.0120		
			1549.000	0.0060		
			1652.000	0.0250		
183 Hf	72	64.000 m	73.160	0.3800	0.4099	0.3087
			113.720	0.0014		
			143.190	0.0047		
			225.000	0.0015		
			284.100	0.0036		
			295.210	0.0017		
			315.860	0.0122		
			397.860	0.0290		
			459.070	0.2700		
			594.800	0.0021		
			686.500	0.0024		
			691.730	0.0030		
			735.050	0.0088		
			783.730	0.6500		
			806.500	0.0014		
			856.780	0.0011		
			1470.200	0.0270		
183 Ta	73	5.100 d	40.976	0.0045	0.1276	0.1182
			46.484	0.0490		
			52.593	0.0510		
			82.918	0.0041		
			84.711	0.0133		
			99.079	0.0660		
			101.934	0.0032		
			102.481	0.0014		
			107.931	0.1080		
			109.726	0.0059		
			142.280	0.0033		
			144.125	0.0251		
			160.527	0.0291		
			161.342	0.0890		
			162.319	0.0485		
			192.643	0.0035		
			203.284	0.0039		
			205.085	0.0088		
			208.810	0.0061		
			209.864	0.0453		
			244.262	0.0860		
			245.235	0.0037		
			246.061	0.2670		
			291.719	0.0379		
			313.000	0.0363		
			313.280	0.0363		
			353.993	0.1140		
			365.640	0.0049		
			406.610	0.0051		
183 Re	75	0.001 s	114.430	1.0600	1.1578	1.0050

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
183 Re	75	0.001 s	145.410	0.8200	1.1578	1.0050
			175.350	0.6700		
			194.200	1.0000		
			203.760	0.5800		
			231.270	0.4600		
			256.400	0.4700		
			259.800	0.0600		
			282.200	0.2200		
			304.400	0.5000		
			320.900	0.1400		
			379.800	0.2100		
			435.500	0.2800		
			488.200	0.4200		
			539.200	0.2700		
			586.000	0.6800		
183 Re	75	70.000 d	46.484	0.0810	0.0397	0.0379
			52.593	0.0330		
			82.918	0.0052		
			84.711	0.0090		
			99.079	0.0270		
			107.931	0.0220		
			109.726	0.0250		
			144.125	0.0014		
			160.527	0.0060		
			161.342	0.0036		
			162.319	0.2000		
			192.643	0.0023		
			205.085	0.0011		
			208.810	0.0310		
			209.864	0.0070		
			244.262	0.0050		
			246.061	0.0130		
			291.719	0.0330		
			313.000	0.0050		
			353.993	0.0055		
			365.640	0.0010		
183 Os m	76	9.900 h	67.240	0.0122	0.4908	0.3600
			126.200	0.0019		
			147.000	0.0050		
			163.200	0.0012		
			230.000	0.0056		
			245.700	0.0037		
			251.700	0.0037		
			273.300	0.0012		
			400.800	0.0075		
			484.500	0.0156		
			796.000	0.0050		
			803.500	0.0031		
			840.000	0.0050		
			878.400	0.0156		
			885.000	0.0022		
			954.800	0.0106		
			1034.700	0.0620		
			1041.000	0.0044		
			1102.000	0.4900		
			1108.000	0.2250		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
183 Os m	76	9.900 h	1353.600	0.0015	0.4908	0.3600
			1904.000	0.0017		
183 Os	76	13.000 h	114.430	0.2070	0.2332	0.1988
			145.410	0.0150		
			151.000	0.0031		
			167.900	0.0770		
			175.350	0.0054		
			197.200	0.0012		
			236.300	0.0220		
			259.800	0.0023		
			338.000	0.0015		
			355.500	0.0050		
			381.800	0.7700		
			404.200	0.0015		
			496.100	0.0054		
			639.800	0.0015		
			736.800	0.0031		
			807.800	0.0038		
			851.000	0.0380		
			1057.900	0.0046		
			1090.000	0.0012		
			1163.300	0.0115		
			1285.200	0.0018		
			1412.000	0.0014		
			1438.900	0.0054		
			1533.000	0.0023		
184 Hf	72	4.120 h	41.400	0.0990	0.1270	0.1177
			43.900	0.0610		
			47.900	0.0120		
			139.100	0.4800		
			181.000	0.1480		
			344.900	0.3800		
184 Ta	73	8.700 h	55.330	0.0042	0.8785	0.6954
			63.700	0.0177		
			87.460	0.0097		
			91.270	0.0106		
			111.192	0.2430		
			123.960	0.0052		
			151.080	0.0016		
			161.270	0.0330		
			162.000	0.0170		
			215.340	0.1170		
			216.540	0.0177		
			226.740	0.0680		
			244.440	0.0360		
			252.850	0.4400		
			253.000	0.0500		
			274.070	0.0044		
			294.990	0.0050		
			296.460	0.0071		
			299.790	0.0048		
			315.400	0.0030		
			318.040	0.2340		
			331.060	0.0013		
			339.530	0.0019		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
184 Ta	73	8.700 h	354.000	0.0015	0.8785	0.6954
			359.200	0.0011		
			371.090	0.0027		
			381.600	0.0017		
			384.280	0.1280		
			414.010	0.7390		
			461.060	0.1090		
			516.590	0.0031		
			528.280	0.0102		
			536.710	0.1310		
			576.300	0.0010		
			641.990	0.0144		
			655.300	0.0026		
			769.760	0.0092		
			792.070	0.1490		
			807.680	0.0050		
			857.240	0.0069		
			894.770	0.1090		
			903.290	0.1540		
			920.930	0.3280		
			942.900	0.0010		
			1018.750	0.0038		
			1022.620	0.0064		
			1110.120	0.0229		
			1172.100	0.0025		
			1173.770	0.0490		
			1207.670	0.0030		
			1312.200	0.0010		
			1313.600	0.0034		
			1425.540	0.0017		
184 Re	75	38.000 d	111.207	0.1710	0.4631	0.3405
			252.845	0.0300		
			539.220	0.0033		
			641.915	0.0194		
			769.778	0.0067		
			792.067	0.3750		
			894.760	0.1560		
			903.282	0.3790		
			1022.630	0.0052		
			1275.110	0.0012		
			1386.330	0.0010		
184 Re m	75	165.000 d	55.278	0.0236	0.1824	0.1467
			63.715	0.0038		
			87.452	0.0024		
			91.270	0.0026		
			104.729	0.1330		
			111.207	0.0590		
			124.060	0.0015		
			161.269	0.0664		
			215.326	0.0284		
			216.547	0.0960		
			226.748	0.0151		
			252.845	0.1090		
			318.008	0.0588		
			384.250	0.0320		
			536.674	0.0337		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
184 Re m	75	165.000 d	641.915	0.0035	0.1824	0.1467
			769.778	0.0024		
			792.067	0.0377		
			857.250	0.0017		
			894.760	0.0281		
			903.282	0.0382		
			920.933	0.0830		
			1022.630	0.0018		
			1110.080	0.0060		
			1173.770	0.0124		
184 Ir	77	3.020 h	97.400	0.0022	0.9640	0.7440
			114.670	0.0063		
			119.790	0.3030		
			131.800	0.0018		
			153.570	0.0042		
			158.260	0.0051		
			163.630	0.0019		
			167.810	0.0027		
			174.320	0.0016		
			185.760	0.0094		
			197.460	0.0043		
			203.310	0.0017		
			209.080	0.0045		
			212.020	0.0186		
			219.700	0.0068		
			242.350	0.0014		
			245.150	0.0018		
			263.980	0.6750		
			272.100	0.0012		
			282.380	0.0017		
			308.000	0.0010		
			337.760	0.0040		
			347.320	0.0027		
			348.930	0.0031		
			361.110	0.0022		
			364.720	0.0112		
			368.030	0.0016		
			376.910	0.0019		
			378.650	0.0013		
			381.700	0.0055		
			390.360	0.2570		
			394.880	0.0055		
			400.000	0.0011		
			404.510	0.0038		
			406.600	0.0089		
			410.210	0.0021		
			411.950	0.0079		
			420.530	0.0021		
			427.000	0.0010		
			431.190	0.0032		
			444.900	0.0011		
			449.800	0.0016		
			464.420	0.0032		
			482.600	0.0010		
			483.900	0.0016		
			488.410	0.0045		
			493.110	0.0580		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
184 Ir	77	3.020 h	500.730	0.0093	0.9640	0.7440
			502.950	0.0294		
			511.000	0.2440		
			522.600	0.0012		
			530.240	0.0014		
			539.690	0.0670		
			550.530	0.0072		
			558.000	0.0028		
			559.300	0.0038		
			563.410	0.0038		
			566.200	0.0021		
			567.200	0.0013		
			571.190	0.0037		
			601.160	0.0323		
			606.410	0.0051		
			611.260	0.0078		
			613.820	0.0132		
			626.590	0.0244		
			653.980	0.0074		
			657.880	0.0050		
			667.600	0.0044		
			682.140	0.0063		
			684.300	0.0016		
			691.580	0.0083		
			697.260	0.0167		
			716.300	0.0017		
			726.100	0.0039		
			728.200	0.0019		
			738.100	0.0016		
			767.490	0.0115		
			778.250	0.0107		
			781.800	0.0016		
			786.960	0.0053		
			815.030	0.0073		
			822.970	0.0380		
			826.050	0.0128		
			832.900	0.0026		
			839.100	0.0144		
			841.330	0.0790		
			857.500	0.0047		
			868.700	0.0017		
			887.000	0.0029		
			896.600	0.0017		
			905.100	0.0023		
			942.870	0.0360		
			944.140	0.0271		
			953.450	0.0076		
			961.260	0.1240		
			970.100	0.0029		
			997.100	0.0020		
			1001.500	0.0021		
			1044.550	0.0530		
			1062.200	0.0043		
			1062.200	0.0240		
			1066.210	0.0152		
			1072.600	0.0020		
			1085.800	0.0015		
			1096.100	0.0010		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
184 Ir	77	3.020 h	1103.500	0.0090	0.9640	0.7440
			1105.280	0.0530		
			1116.910	0.0088		
			1133.700	0.0013		
			1138.400	0.0010		
			1142.250	0.0072		
			1154.310	0.0072		
			1160.290	0.0081		
			1197.600	0.0017		
			1205.800	0.0020		
			1217.200	0.0027		
			1225.300	0.0024		
			1229.400	0.0121		
			1236.930	0.0209		
			1247.810	0.0265		
			1276.000	0.0013		
			1281.400	0.0011		
			1291.800	0.0018		
			1301.530	0.0024		
			1311.400	0.0033		
			1314.100	0.0024		
			1323.770	0.0070		
			1325.730	0.0084		
			1334.300	0.0232		
			1361.500	0.0038		
			1378.700	0.0022		
			1380.700	0.0034		
			1396.800	0.0012		
			1412.700	0.0022		
			1424.100	0.0022		
			1436.400	0.0014		
			1452.500	0.0081		
			1457.890	0.0137		
			1469.800	0.0017		
			1493.740	0.0052		
			1504.720	0.0036		
			1514.930	0.0067		
			1544.600	0.0046		
			1550.660	0.0063		
			1570.200	0.0016		
			1578.170	0.0049		
			1607.700	0.0051		
			1625.950	0.0086		
			1635.500	0.0032		
			1672.400	0.0370		
			1697.800	0.0040		
			1746.200	0.0017		
			1818.000	0.0024		
			1849.700	0.0034		
			1895.600	0.0024		
			1899.800	0.0015		
			1914.600	0.0018		
			1940.400	0.0013		
			1945.900	0.0024		
			1962.300	0.0014		
			1992.700	0.0011		
			2005.300	0.0015		
			2014.800	0.0017		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
184 Ir	77	3.020 h	2028.500	0.0014	0.9640	0.7440
			2053.000	0.0450		
			2080.100	0.0022		
			2134.300	0.0059		
			2166.400	0.0028		
			2243.000	0.0094		
			2257.100	0.0021		
			2373.500	0.0015		
			2399.400	0.0022		
			2469.800	0.0015		
			2478.700	0.0016		
			2665.300	0.0024		
184 Pt	78	0.001 s	112.000	0.0600	0.9613	0.7779
			118.000	0.0564		
			162.400	0.5078		
			272.200	0.8060		
			286.500	0.0120		
			360.800	0.5723		
			389.500	0.0564		
			424.000	0.0400		
			431.000	0.5400		
			439.000	0.1934		
			486.500	0.0887		
			554.000	0.0443		
			610.000	0.5158		
			676.500	0.0120		
			775.000	0.0153		
			796.000	0.0588		
			839.000	0.0347		
			867.000	0.0467		
			930.000	0.0600		
			1065.000	0.0653		
			1235.000	0.1612		
184 Au	79	53.000 s	112.100	0.0080	1.4960	1.1642
			133.800	0.0087		
			163.000	1.0000		
			222.000	0.0410		
			229.400	0.0064		
			251.600	0.0110		
			273.000	0.8000		
			291.900	0.0073		
			312.000	0.0061		
			315.200	0.0090		
			329.000	0.0450		
			352.300	0.0110		
			362.500	0.3500		
			366.800	0.0100		
			378.900	0.0280		
			390.800	0.0170		
			408.200	0.0130		
			424.200	0.0100		
			432.700	0.0380		
			435.300	0.0360		
			441.300	0.0064		
			479.600	0.0063		
			486.000	0.1190		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
184 Au	79	53.000 s	524.600	0.0080	1.4960	1.1642
			530.500	0.0040		
			586.400	0.0230		
			592.100	0.0650		
			600.300	0.0050		
			609.700	0.0172		
			611.900	0.0135		
			627.500	0.0060		
			631.300	0.0140		
			635.100	0.0090		
			648.700	0.0610		
			652.400	0.0085		
			664.500	0.0390		
			672.900	0.0070		
			681.100	0.0160		
			691.200	0.0110		
			701.000	0.0050		
			753.000	0.0100		
			777.000	0.1320		
			783.600	0.0180		
			798.800	0.0340		
			806.700	0.0050		
			811.200	0.0080		
			822.100	0.0130		
			826.700	0.0160		
			831.200	0.0430		
			844.000	0.1070		
			864.800	0.0250		
			867.800	0.0130		
			871.000	0.0750		
			892.100	0.0060		
			899.000	0.0070		
			918.100	0.0050		
			923.400	0.0190		
			932.300	0.0105		
			939.000	0.0150		
			949.800	0.0060		
			962.500	0.0090		
			981.800	0.0040		
			996.600	0.0065		
			1001.400	0.0190		
			1009.600	0.0510		
			1026.500	0.0260		
			1034.000	0.0070		
			1071.300	0.0470		
			1074.000	0.0120		
			1084.800	0.0100		
			1090.300	0.0370		
			1100.500	0.0115		
			1155.700	0.0095		
			1161.700	0.0080		
			1168.300	0.0120		
			1173.300	0.0070		
			1229.700	0.0080		
			1239.700	0.0105		
			1245.700	0.0460		
			1274.500	0.0050		
			1290.900	0.0090		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
184 Au	79	53.000 s	1293.200	0.0060	1.4960	1.1642
			1305.000	0.0120		
			1308.700	0.0280		
			1322.900	0.0055		
			1357.000	0.0090		
			1362.900	0.0095		
			1390.500	0.0070		
			1397.600	0.0340		
			1417.000	0.0190		
			1448.900	0.0070		
			1459.400	0.0110		
			1505.200	0.0060		
			1519.500	0.0160		
			1525.600	0.0230		
			1532.300	0.0200		
			1546.000	0.0055		
			1551.300	0.0190		
			1576.300	0.0060		
			1611.000	0.0050		
			1614.500	0.0060		
			1644.400	0.0070		
			1663.600	0.0140		
			1691.400	0.0095		
			1698.500	0.0190		
			1713.800	0.0280		
			1723.400	0.0110		
			1739.400	0.0090		
			1754.700	0.0640		
			1805.300	0.0135		
			1814.200	0.0530		
			1848.900	0.0150		
			1982.500	0.0080		
			1989.400	0.0180		
			2039.500	0.0050		
			2117.800	0.0180		
			2196.300	0.0280		
			2202.200	0.0150		
			2468.200	0.0060		
			2475.200	0.0390		
			2490.900	0.0200		
185 Ta	73	49.000 m	42.290	0.0490	0.0799	0.0713
			65.860	0.0390		
			69.700	0.0200		
			94.590	0.0013		
			107.850	0.0270		
			147.300	0.0113		
			150.300	0.0012		
			164.330	0.0012		
			173.680	0.2210		
			177.590	0.2570		
			187.880	0.0014		
			243.700	0.0370		
			394.800	0.0134		
			541.600	0.0190		
			580.300	0.0098		
			587.600	0.0134		
			636.300	0.0010		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
185 Ta	73	49.000 m	649.800	0.0010	0.0799	0.0713
			869.100	0.0013		
			884.700	0.0015		
			913.000	0.0012		
			964.700	0.0018		
			992.400	0.0046		
			1058.200	0.0054		
185 Os	76	94.000 d	71.370	0.0090	0.3854	0.2828
			125.358	0.0139		
			162.854	0.0157		
			234.158	0.0069		
			592.066	0.0129		
			646.111	0.8110		
			717.424	0.0426		
			874.814	0.0680		
			880.272	0.0543		
185 Ir	77	14.000 h	37.400	0.0337	0.2546	0.1949
			60.000	0.0571		
			90.450	0.0128		
			94.500	0.0040		
			97.400	0.0414		
			100.800	0.0239		
			127.900	0.0067		
			153.600	0.0200		
			160.750	0.0173		
			185.000	0.0085		
			220.400	0.0115		
			222.350	0.0164		
			223.800	0.0208		
			254.400	0.1300		
			314.300	0.0089		
			377.700	0.0020		
			507.000	0.0067		
			511.000	0.0490		
			601.300	0.0014		
			691.900	0.0041		
			1040.700	0.0047		
			1418.000	0.0053		
			1571.600	0.0026		
			1641.800	0.0114		
			1668.300	0.0358		
			1685.000	0.0030		
			1709.600	0.0034		
			1732.200	0.0271		
			1738.400	0.0237		
			1779.800	0.0037		
			1804.900	0.0040		
			1828.800	0.1000		
			1870.000	0.0118		
			1876.600	0.0044		
186 Ta	73	10.500 m	91.000	0.0220	0.8573	0.6774
			92.700	0.0170		
			122.300	0.2300		
			146.000	0.0059		
			183.200	0.0350		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
186 Ta	73	10.500 m	184.200	0.0060	0.8573	0.6774
			197.900	0.5900		
			214.900	0.5000		
			268.800	0.0090		
			274.200	0.0800		
			277.100	0.0150		
			292.500	0.0410		
			293.700	0.0060		
			307.500	0.1140		
			309.200	0.0270		
			315.600	0.0180		
			327.200	0.0090		
			338.500	0.0060		
			341.000	0.0029		
			383.800	0.0060		
			402.000	0.0090		
			412.000	0.0060		
			417.700	0.1500		
			440.000	0.0094		
			442.000	0.0094		
			448.000	0.0060		
			457.000	0.0250		
			460.000	0.0029		
			465.300	0.0130		
			488.000	0.0060		
			510.600	0.4400		
			541.400	0.0029		
			546.300	0.0059		
			567.200	0.0400		
			583.200	0.0130		
			596.500	0.0029		
			601.000	0.0060		
			610.300	0.0400		
			615.300	0.3300		
			618.100	0.0060		
			635.000	0.0060		
			641.600	0.0041		
			646.600	0.0018		
			649.500	0.0018		
			654.900	0.0180		
			703.000	0.0060		
			709.000	0.0120		
			726.000	0.0120		
			737.500	0.3400		
			739.200	0.1180		
			745.000	0.0029		
			759.400	0.0210		
			799.800	0.0280		
			814.000	0.0029		
			823.000	0.0029		
			830.000	0.0180		
			869.500	0.0029		
			884.100	0.0230		
			893.000	0.0088		
			909.000	0.0059		
			923.000	0.0140		
			947.500	0.0029		
			1046.000	0.0029		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
186 Ta	73	10.500 m	1092.500	0.0059	0.8573	0.6774
			1124.500	0.0059		
			1162.000	0.0029		
			1175.000	0.0029		
			1199.500	0.0029		
			1210.000	0.0029		
			1213.000	0.0024		
			1231.000	0.0018		
			1238.000	0.0024		
			1284.000	0.0029		
			1298.000	0.0029		
			1319.000	0.0029		
			1322.000	0.0035		
			1398.000	0.0047		
			1409.000	0.0059		
			1429.000	0.0029		
			1485.000	0.0029		
			1520.000	0.0029		
186 Re	75	3.777 d	122.700	0.0180	0.0065	0.0069
			137.157	0.0860		
186 Re m	75	200136.986 y	40.290	0.0500	0.0088	0.0073
			59.000	0.1778		
			99.330	0.0107		
186 Ir	77	1.750 h	137.100	0.3300	0.4967	0.3771
			296.900	0.1300		
			477.000	0.0100		
			511.000	0.2546		
			569.000	0.0130		
			584.000	0.0066		
			630.300	0.1900		
			636.000	0.0330		
			712.000	0.0400		
			767.300	0.2000		
			774.000	0.1200		
			933.000	0.0130		
			986.000	0.0900		
			1027.000	0.0082		
			1045.000	0.0066		
			1313.000	0.0100		
			1342.000	0.0066		
			1617.000	0.0330		
			1648.000	0.0033		
			1754.000	0.0360		
186 Au	79	10.700 m	191.530	1.0000	0.8309	0.6556
			205.000	0.0330		
			225.100	0.0070		
			231.700	0.0093		
			257.900	0.0140		
			266.500	0.0042		
			279.700	0.0220		
			298.840	0.4100		
			307.900	0.0066		
			326.800	0.0130		
			349.400	0.0210		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
186 Au	79	10.700 m	384.300	0.0300	0.8309	0.6556
			387.000	0.0170		
			415.560	0.1400		
			423.900	0.0100		
			430.300	0.0290		
			440.300	0.0200		
			461.800	0.0016		
			466.300	0.0210		
			501.300	0.0350		
			607.010	0.0900		
			607.200	0.0850		
			609.400	0.0240		
			615.600	0.0050		
			676.500	0.0530		
			704.400	0.0090		
			732.400	0.0180		
			765.400	0.1700		
			791.000	0.0200		
			796.400	0.0050		
			798.700	0.0860		
			799.900	0.0210		
			800.400	0.0210		
			810.700	0.0061		
			873.000	0.0200		
			881.600	0.0340		
			905.100	0.0060		
			907.700	0.0050		
			917.500	0.0070		
			927.300	0.0040		
			956.700	0.0010		
			984.500	0.0210		
			1031.000	0.0220		
			1098.000	0.0068		
			1121.900	0.0070		
			1142.700	0.0067		
			1176.100	0.0100		
			1181.500	0.0100		
			1203.000	0.0140		
			1216.200	0.0600		
			1226.100	0.0160		
			1271.100	0.0080		
			1289.200	0.0330		
			1323.700	0.0080		
			1345.500	0.0080		
			1400.000	0.0055		
			1441.300	0.0076		
			1532.700	0.0160		
			1589.500	0.0070		
			1725.900	0.0200		
			1737.600	0.0300		
			2024.600	0.0320		
			2035.600	0.0460		
187 W	74	23.900 h	72.060	0.1190	0.2608	0.1972
			134.220	0.0940		
			206.280	0.0015		
			246.180	0.0013		
			479.530	0.2340		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
187 W	74	23.900 h	511.760	0.0069	0.2608	0.1972
			551.550	0.0545		
			589.090	0.0013		
			618.370	0.0670		
			625.520	0.0117		
			685.810	0.2930		
			745.210	0.0032		
			772.880	0.0442		
			864.540	0.0036		
			879.430	0.0015		
188 W	74	69.400 d	63.580	0.0011	0.0010	0.0009
			227.090	0.0022		
			290.669	0.0040		
188 Re m	75	18.600 m	63.600	0.2100	0.0151	0.0158
			92.500	0.0540		
			105.900	0.1140		
			156.000	0.0065		
			169.500	0.0011		
188 Re	75	16.980 h	155.040	0.1490	0.0244	0.0212
			477.960	0.0104		
			633.030	0.0125		
			635.000	0.0015		
			672.510	0.0011		
			829.510	0.0041		
			931.320	0.0056		
188 Ir	77	1.729 d	155.000	0.3300	0.7470	0.5601
			312.020	0.0027		
			322.930	0.0190		
			332.400	0.0013		
			350.000	0.0025		
			385.300	0.0022		
			478.100	0.1560		
			487.600	0.0023		
			594.000	0.0019		
			620.600	0.0097		
			633.110	0.2200		
			635.050	0.0620		
			641.500	0.0053		
			672.300	0.0136		
			757.200	0.0025		
			810.500	0.0022		
			824.800	0.0156		
			829.500	0.0660		
			886.000	0.0044		
			940.000	0.0056		
			987.700	0.0075		
			1018.000	0.0097		
			1096.800	0.0131		
			1142.700	0.0042		
			1150.000	0.0058		
			1175.000	0.0100		
			1210.300	0.0660		
			1296.000	0.0023		
			1303.700	0.0047		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
188 Ir	77	1.729 d	1323.400	0.0062	0.7470	0.5601
			1329.000	0.0023		
			1332.600	0.0037		
			1436.000	0.0137		
			1453.000	0.0115		
			1457.900	0.0114		
			1462.700	0.0044		
			1466.000	0.0072		
			1559.600	0.0069		
			1575.000	0.0190		
			1620.000	0.0055		
			1653.000	0.0030		
			1688.600	0.0048		
			1705.000	0.0111		
			1717.000	0.0410		
			1802.500	0.0062		
			1812.400	0.0025		
			1931.000	0.0022		
			1945.000	0.0280		
			2012.000	0.0047		
			2050.000	0.0340		
			2059.600	0.0470		
			2097.800	0.0340		
			2098.800	0.0340		
			2194.000	0.0158		
			2214.600	0.1250		
			2222.000	0.0022		
			2349.600	0.0041		
			2462.400	0.0014		
188 Pt	78	10.200 d	41.940	0.0055	0.0706	0.0638
			54.760	0.0080		
			96.680	0.0015		
			98.380	0.0034		
			132.880	0.0023		
			140.310	0.0230		
			187.640	0.1900		
			195.130	0.1800		
			197.780	0.0013		
			280.540	0.0025		
			283.000	0.0013		
			290.600	0.0011		
			381.600	0.0730		
			423.580	0.0440		
			478.300	0.0150		
189 Re	75	1.013 d	36.170	0.0026	0.0322	0.0292
			69.520	0.0185		
			95.230	0.0079		
			147.100	0.0230		
			149.900	0.0096		
			185.850	0.0240		
			188.600	0.0085		
			206.300	0.0016		
			216.700	0.0780		
			219.400	0.0570		
			245.000	0.0400		
			275.800	0.0033		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
189 Re	75	1.013 d	462.600	0.0012	0.0322	0.0292
			496.800	0.0014		
			504.200	0.0023		
			563.700	0.0051		
			599.800	0.0027		
189 Ir	77	13.300 d	36.170	0.0075	0.0147	0.0133
			56.500	0.0017		
			59.100	0.0141		
			69.520	0.0400		
			95.230	0.0043		
			147.100	0.0012		
			185.850	0.0020		
			197.400	0.0030		
			216.700	0.0058		
			219.400	0.0059		
			233.500	0.0033		
			245.000	0.0670		
			275.800	0.0060		
189 Pt	78	10.870 h	82.220	0.0180	0.1196	0.0935
			94.340	0.0400		
			113.820	0.0160		
			130.540	0.0017		
			141.180	0.0260		
			176.530	0.0054		
			181.300	0.0017		
			186.700	0.0140		
			190.830	0.0014		
			203.780	0.0030		
			223.340	0.0090		
			243.500	0.0440		
			258.370	0.0020		
			284.580	0.0012		
			300.510	0.0230		
			317.650	0.0200		
			343.200	0.0012		
			343.800	0.0012		
			351.100	0.0012		
			403.900	0.0090		
			493.300	0.0020		
			511.000	0.0095		
			530.420	0.0015		
			539.850	0.0018		
			544.910	0.0360		
			568.850	0.0430		
			607.600	0.0510		
			623.150	0.0015		
			627.080	0.0140		
			644.300	0.0041		
			698.330	0.0014		
			721.380	0.0570		
			733.730	0.0022		
			735.780	0.0024		
			792.670	0.0090		
			798.200	0.0012		
			828.060	0.0019		
			885.600	0.0011		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
189 Pt	78	10.870 h	924.750	0.0017	0.1196	0.0935
			1026.730	0.0021		
			1106.300	0.0011		
			1254.030	0.0023		
			1323.660	0.0017		
			1457.850	0.0013		
			1476.910	0.0023		
190 Re	75	3.100 m	186.900	0.4500	0.7055	0.5554
			224.100	0.1880		
			361.400	0.2300		
			371.500	0.2200		
			397.400	0.0960		
			407.300	0.1350		
			407.300	0.0169		
			431.400	0.1600		
			557.700	0.3400		
			569.100	0.2400		
			605.300	0.1500		
			630.600	0.1600		
			828.900	0.2700		
			838.800	0.0530		
190 Ir m	77	3.100 h	186.700	0.6650	0.8487	0.6746
			361.200	0.8990		
			502.500	0.9270		
			616.500	0.9350		
190 Ir	77	12.100 d	137.800	0.0240	0.7582	0.5989
			186.650	0.4900		
			196.850	0.0760		
			198.000	0.0163		
			207.800	0.0218		
			207.800	0.0054		
			223.800	0.0340		
			288.200	0.0082		
			294.600	0.0540		
			334.000	0.0110		
			344.000	0.0160		
			361.200	0.1170		
			371.000	0.2070		
			375.200	0.0160		
			380.000	0.0190		
			394.800	0.0080		
			397.300	0.0580		
			407.200	0.0299		
			407.200	0.2310		
			420.700	0.0140		
			432.300	0.0270		
			447.500	0.0240		
			449.500	0.0140		
			478.000	0.0177		
			482.500	0.0106		
			490.800	0.0060		
			502.500	0.0092		
			518.400	0.3100		
			557.800	0.2720		
			569.300	0.2610		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
190 Ir	77	12.100 d	605.300	0.3800	0.7582	0.5989
			630.800	0.0410		
			655.900	0.0100		
			726.400	0.0330		
			768.500	0.0210		
			829.000	0.0440		
			839.200	0.0110		
			1035.700	0.0240		
			1133.600	0.0050		
			1199.900	0.0050		
			1323.900	0.0060		
			1386.500	0.0040		
			1396.500	0.0014		
			1436.700	0.0024		
191 Os	76	15.400 d	129.400	0.2600	0.0155	0.0164
192 Os	76	5.900 s	48.000	0.1200	1.1223	0.9123
			201.300	0.1264		
			205.800	0.8550		
			218.300	0.0038		
			233.900	0.0200		
			247.500	0.0067		
			283.200	0.0827		
			292.400	0.0437		
			302.400	0.7239		
			306.800	0.1083		
			329.300	0.0180		
			374.500	0.2422		
			379.000	0.0200		
			420.400	0.0600		
			452.000	0.0427		
			453.000	0.5767		
			484.500	0.5985		
			489.000	0.1454		
			502.500	0.0114		
			508.300	0.1178		
			555.500	0.0180		
			563.200	0.1178		
			569.200	0.6840		
			580.300	0.0390		
			605.700	0.1100		
			619.500	0.1064		
			624.000	0.0162		
			703.500	0.0038		
192 Ir	77	74.020 d	136.340	0.0018	0.4581	0.3960
			201.306	0.0047		
			205.791	0.0329		
			283.255	0.0026		
			295.951	0.2896		
			308.447	0.2967		
			316.500	0.8284		
			374.476	0.0073		
			415.400	0.0015		
			416.460	0.0066		
			468.060	0.4780		
			484.565	0.0316		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
192 Ir	77	74.020 d	489.060	0.0040	0.4581	0.3960
			588.573	0.0452		
			604.398	0.0818		
			612.451	0.0533		
			884.523	0.0030		
192 Ir	77	241.165 y	161.000	0.0013	0.0001	0.0001
193 Os	76	1.250 d	73.012	0.0350	0.0332	0.0284
			96.820	0.0011		
			106.993	0.0069		
			138.892	0.0464		
			180.030	0.0020		
			181.810	0.0021		
			219.130	0.0030		
			251.620	0.0024		
			280.430	0.0135		
			288.790	0.0016		
			298.830	0.0020		
			321.560	0.0139		
			361.810	0.0032		
			387.460	0.0137		
			420.300	0.0018		
			460.490	0.0430		
			484.250	0.0018		
			557.360	0.0142		
			559.260	0.0053		
193 Pt	78	4.330 d	135.500	0.0011	0.0001	0.0001
193 Au m	79	3.900 s	38.200	0.0015	0.1396	0.1243
			219.700	0.0280		
			258.000	0.9612		
193 Au	79	17.650 h	37.650	0.0050	0.0701	0.0635
			44.330	0.0090		
			73.620	0.0050		
			99.880	0.0100		
			110.280	0.0410		
			112.515	0.0410		
			114.155	0.0100		
			117.990	0.0077		
			119.640	0.0025		
			155.680	0.0048		
			173.520	0.0400		
			186.170	0.1390		
			187.830	0.0120		
			206.850	0.0015		
			215.410	0.0013		
			215.600	0.0013		
			221.400	0.0011		
			230.500	0.0074		
			232.180	0.0074		
			251.400	0.0036		
			255.570	0.0920		
			259.050	0.0028		
			268.220	0.0540		
			269.840	0.0116		

Nuclide	Z	Half Life	Energy keV	Yield	R*m2/h/Ci	Rem/h/Ci
193 Au	79	17.650 h	290.330	0.0012	0.0701	0.0635
			303.410	0.0037		
			317.730	0.0032		
			324.890	0.0048		
			377.100	0.0070		
			401.300	0.0016		
			408.400	0.0018		
			424.760	0.0021		
			437.410	0.0068		
			439.040	0.0263		
			476.980	0.0064		
			489.600	0.0032		
			491.280	0.0096		
			520.970	0.0011		
			522.660	0.0010		
193 Hg	80	11.100 h	39.490	0.0800	0.5109	0.3990
			165.500	0.0035		
			218.000	0.0520		
			219.700	0.0270		
			258.000	0.6100		
			290.700	0.0150		
			299.800	0.0040		
			345.400	0.0119		
			382.600	0.0430		
			394.000	0.0308		
			407.700	0.2484		
			462.000	0.0109		
			487.800	0.0034		
			510.300	0.0070		
			511.000	0.0129		
			535.600	0.0201		
			537.600	0.0196		
			573.200	0.1390		
			601.000	0.0211		
			614.400	0.0050		
			626.200	0.0065		
			639.000	0.0062		
			685.000	0.0077		
			700.700	0.0037		
			712.200	0.0052		
			727.200	0.0017		
			731.500	0.0025		
			739.400	0.0042		
			767.000	0.0017		
			816.700	0.0027		
			856.500	0.0020		
			877.700	0.0270		
			913.000	0.0107		
			932.500	0.0670		
			994.800	0.0156		
			1049.200	0.0030		
			1052.300	0.0060		
			1076.200	0.0027		
			1111.000	0.0180		
			1132.900	0.0016		
			1160.000	0.0035		
			1173.000	0.0200		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
193 Hg	80	11.100 h	1232.400	0.0097	0.5109	0.3990
			1241.800	0.0240		
			1268.500	0.0031		
			1276.800	0.0011		
			1285.800	0.0062		
			1297.000	0.0020		
			1315.300	0.0067		
			1326.300	0.0211		
			1340.200	0.0149		
			1352.500	0.0022		
			1366.000	0.0142		
			1392.000	0.0015		
			1407.700	0.0114		
			1433.600	0.0055		
			1443.000	0.0026		
			1462.000	0.0046		
			1487.000	0.0150		
			1504.800	0.0062		
			1518.400	0.0042		
			1558.000	0.0013		
			1625.300	0.0045		
			1640.200	0.0150		
			1649.700	0.0124		
			1734.500	0.0019		
			1748.000	0.0035		
			1851.000	0.0015		
			1926.000	0.0017		
			1964.500	0.0013		
194 Os	76	6.004 y	43.100	0.0230	0.0010	0.0006
194 Ir	77	19.150 h	293.541	0.0250	0.0447	0.0384
			300.741	0.0035		
			328.448	0.1300		
			589.179	0.0014		
			621.971	0.0033		
			645.146	0.0116		
			938.690	0.0059		
			1150.750	0.0059		
			1183.490	0.0030		
			1468.910	0.0019		
194 Ir m	77	171.000 d	111.700	0.0880	1.2140	0.9667
			324.000	0.0200		
			328.500	0.9300		
			338.800	0.5500		
			390.800	0.3500		
			482.600	0.9700		
			562.400	0.3500		
			600.500	0.6200		
			687.800	0.5900		
			1011.800	0.0360		
194 Au	79	1.646 d	164.000	0.0013	0.5085	0.4021
			203.010	0.0034		
			293.580	0.1100		
			300.770	0.0091		
			318.140	0.0033		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
194 Au	79	1.646 d	328.500	0.6300	0.5085	0.4021
			364.870	0.0152		
			449.360	0.0017		
			482.800	0.0117		
			511.000	0.0332		
			528.760	0.0170		
			529.880	0.0063		
			589.240	0.0026		
			593.350	0.0035		
			594.280	0.0013		
			607.540	0.0031		
			621.200	0.0063		
			622.000	0.0176		
			645.180	0.0228		
			668.270	0.0012		
			703.540	0.0044		
			736.230	0.0013		
			810.650	0.0020		
			855.800	0.0011		
			889.970	0.0016		
			925.150	0.0030		
			938.710	0.0118		
			948.290	0.0230		
			1000.190	0.0021		
			1038.560	0.0032		
			1048.580	0.0089		
			1104.060	0.0214		
			1119.700	0.0013		
			1150.780	0.0144		
			1156.610	0.0045		
			1175.340	0.0207		
			1183.520	0.0066		
			1218.760	0.0117		
			1291.700	0.0011		
			1293.700	0.0018		
			1302.290	0.0028		
			1308.550	0.0016		
			1339.600	0.0030		
			1342.150	0.0123		
			1421.650	0.0034		
			1431.600	0.0015		
			1441.870	0.0019		
			1450.060	0.0034		
			1463.450	0.0076		
			1468.890	0.0670		
			1487.000	0.0014		
			1491.970	0.0018		
			1500.500	0.0040		
			1562.800	0.0032		
			1592.400	0.0107		
			1593.500	0.0063		
			1595.800	0.0180		
			1602.010	0.0025		
			1617.730	0.0021		
			1622.230	0.0020		
			1632.860	0.0024		
			1670.660	0.0018		
			1675.700	0.0014		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
194 Au	79	1.646 d	1689.700	0.0018	0.5085	0.4021
			1715.230	0.0071		
			1735.310	0.0030		
			1785.470	0.0040		
			1797.310	0.0060		
			1803.000	0.0019		
			1806.000	0.0018		
			1829.410	0.0025		
			1835.330	0.0042		
			1885.900	0.0183		
			1887.000	0.0157		
			1911.300	0.0013		
			1924.180	0.0208		
			.958.740	0.0017		
			1969.650	0.0045		
			2043.670	0.0380		
			2113.930	0.0028		
			2215.500	0.0018		
			2312.010	0.0017		
194 Tl	81	32.800 m	96.900	0.0770	1.2819	0.9748
			98.900	0.0062		
			107.200	0.0077		
			110.960	0.0640		
			208.900	0.0620		
			219.000	0.0100		
			227.980	0.0660		
			233.100	0.0210		
			239.000	0.0090		
			255.400	0.0920		
			284.000	0.0180		
			298.100	0.0210		
			299.500	0.0100		
			319.800	0.0390		
			352.200	0.0170		
			366.500	0.0180		
			380.500	0.0140		
			428.200	0.9600		
			446.500	0.0280		
			451.000	0.0500		
			462.500	0.0460		
			464.500	0.0230		
			511.000	0.3736		
			553.200	0.0460		
			600.500	0.0170		
			636.300	0.9900		
			650.300	0.0690		
			664.200	0.0120		
			735.000	0.2200		
			749.000	0.7700		
195 Ir	77	2.500 h	30.850	0.0130	0.0087	0.0082
			98.850	0.1000		
			129.700	0.0120		
			211.300	0.0240		
195 Ir m	77	3.800 h	30.850	0.0190	0.1981	0.1656
			98.850	0.1050		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
195 Ir m	77	3.800 h	119.120	0.0038	0.1981	0.1656
			129.700	0.0170		
			140.500	0.0077		
			150.110	0.0017		
			172.780	0.0500		
			199.580	0.0058		
			201.650	0.0144		
			211.000	0.0026		
			211.300	0.0190		
			216.000	0.0086		
			235.400	0.0026		
			239.000	0.0013		
			239.210	0.0170		
			243.870	0.0077		
			251.610	0.0180		
			255.790	0.0086		
			259.330	0.0077		
			267.100	0.0058		
			287.800	0.0100		
			290.300	0.0190		
			306.000	0.0084		
			306.480	0.0136		
			319.900	0.0960		
			325.180	0.0077		
			350.900	0.0102		
			356.380	0.0180		
			359.310	0.0460		
			364.940	0.0950		
			373.390	0.0110		
			378.240	0.0100		
			383.000	0.0024		
			383.300	0.0024		
			385.200	0.0016		
			387.100	0.0032		
			389.850	0.0058		
			401.300	0.0029		
			409.040	0.0144		
			413.600	0.0026		
			419.690	0.0038		
			422.400	0.0013		
			425.410	0.0067		
			427.800	0.0067		
			432.860	0.0960		
			440.400	0.0021		
			445.550	0.0047		
			455.940	0.0078		
			475.380	0.0015		
			481.170	0.0270		
			495.800	0.0051		
			498.600	0.0012		
			506.160	0.0064		
			534.100	0.0035		
			537.400	0.0015		
			565.480	0.0022		
			575.350	0.0150		
			596.480	0.0021		
			616.500	0.0019		
			684.880	0.0960		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
195 Ir m	77	3.800 h	723.700	0.0019	0.1981	0.1656
			750.800	0.0020		
			800.900	0.0106		
195 Pt	78	4.020 d	30.890	0.0228	0.0084	0.0076
			98.900	0.1140		
			129.790	0.0283		
195 Au m	79	30.500 s	61.460	0.0017	0.0998	0.0904
			200.380	0.0170		
			261.750	0.6800		
195 Au	79	183.000 d	30.876	0.0075	0.0058	0.0058
			98.880	0.1090		
			129.757	0.0082		
195 Hg	80	9.900 h	61.460	0.0640	0.0768	0.0578
			180.110	0.0195		
			207.100	0.0162		
			261.750	0.0160		
			439.500	0.0013		
			585.130	0.0204		
			599.660	0.0183		
			779.800	0.0700		
			821.080	0.0030		
			841.270	0.0028		
			841.300	0.0037		
			930.900	0.0043		
			1021.560	0.0019		
			1111.040	0.0148		
			1172.380	0.0128		
195 Hg m	80	1.733 d	37.090	0.0185	0.0920	0.0767
			200.380	0.0085		
			207.100	0.0039		
			261.750	0.3230		
			279.250	0.0015		
			368.550	0.0035		
			386.400	0.0029		
			387.870	0.0231		
			452.040	0.0022		
			467.360	0.0030		
			525.750	0.0053		
			560.270	0.0750		
			575.520	0.0023		
			680.680	0.0023		
			853.050	0.0028		
			961.920	0.0023		
			1027.450	0.0012		
			1241.170	0.0067		
195 Tl m	81	3.600 s	99.000	0.0062	0.1999	0.1715
			383.640	0.9100		
195 Tl	81	69.600 m	37.000	0.0270	0.5503	0.4101
			131.140	0.0015		
			197.100	0.0024		
			225.930	0.0128		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
195 Tl	81	69.600 m	242.150	0.0430	0.5503	0.4101
			247.300	0.0129		
			263.510	0.0088		
			279.190	0.0370		
			295.140	0.0014		
			300.600	0.0240		
			321.300	0.0017		
			326.000	0.0015		
			356.990	0.0046		
			369.260	0.0021		
			373.240	0.0060		
			403.860	0.0012		
			408.800	0.0016		
			456.350	0.0011		
			464.010	0.0011		
			470.800	0.0013		
			471.700	0.0013		
			482.800	0.0035		
			482.800	0.0018		
			485.380	0.0043		
			511.000	0.0590		
			511.000	0.0048		
			511.000	0.0636		
			542.160	0.0105		
			544.000	0.0028		
			547.340	0.0067		
			558.380	0.0260		
			563.520	0.1050		
			582.300	0.0011		
			592.590	0.0120		
			595.200	0.0022		
			600.640	0.0065		
			613.880	0.0071		
			620.960	0.0022		
			642.600	0.0015		
			655.450	0.0046		
			657.110	0.0017		
			704.030	0.0019		
			711.150	0.0080		
			725.270	0.0063		
			727.400	0.0064		
			733.940	0.0064		
			755.770	0.0010		
			761.420	0.0017		
			764.520	0.0041		
			777.680	0.0111		
			805.320	0.0018		
			814.680	0.0189		
			821.300	0.0010		
			849.300	0.0013		
			855.940	0.0030		
			861.130	0.0015		
			884.470	0.1000		
			893.060	0.0089		
			921.590	0.0225		
			927.900	0.0037		
			951.400	0.0018		
			967.460	0.0214		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
195 Tl	81	69.600 m	980.230	0.0013	0.5503	0.4101
			1004.540	0.0015		
			1009.990	0.0033		
			1063.100	0.0013		
			1067.160	0.0040		
			1092.820	0.0020		
			1100.330	0.0230		
			1102.900	0.0013		
			1121.660	0.0210		
			1121.700	0.0031		
			1140.470	0.0054		
			1193.070	0.0010		
			1200.000	0.0014		
			1210.880	0.0010		
			1216.530	0.0023		
			1248.000	0.0016		
			1269.510	0.0240		
			1288.360	0.0010		
			1347.780	0.0117		
			1363.000	0.0015		
			1363.880	0.0840		
			1364.000	0.0012		
			1383.430	0.0020		
			1390.430	0.0034		
			1435.520	0.0062		
			1443.500	0.0011		
			1447.300	0.0011		
			1456.600	0.0015		
			1490.250	0.0047		
			1511.620	0.0145		
			1531.010	0.0017		
			1548.000	0.0021		
			1548.000	0.0013		
			1552.260	0.0026		
			1588.400	0.0011		
			1591.700	0.0021		
			1627.000	0.0058		
			1660.700	0.0018		
			1664.200	0.0059		
			1688.200	0.0016		
			1690.000	0.0016		
			1696.600	0.0010		
			1705.880	0.0160		
			1714.400	0.0039		
			1714.400	0.0059		
			1735.400	0.0011		
			1743.080	0.0030		
			1756.930	0.0032		
			1778.200	0.0078		
			1778.200	0.0025		
			1794.130	0.0041		
			1842.160	0.0044		
			1856.400	0.0010		
			1912.340	0.0014		
			1950.880	0.0018		
			1961.600	0.0011		
			1977.750	0.0176		
			2004.400	0.0017		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
195 Tl	81	69.600 m	2004.400	0.0013	0.5503	0.4101
			2014.750	0.0089		
			2020.800	0.0010		
			2025.800	0.0037		
			2031.800	0.0013		
			2057.400	0.0032		
			2060.400	0.0010		
			2101.400	0.0011		
			2140.970	0.0048		
			2150.100	0.0019		
			2177.900	0.0020		
			2212.800	0.0021		
			2234.210	0.0024		
			2251.900	0.0011		
			2255.600	0.0022		
			2267.850	0.0020		
			2274.800	0.0015		
			2301.200	0.0012		
			2362.900	0.0031		
			2366.000	0.0054		
			2382.900	0.0044		
			2388.000	0.0017		
			2391.800	0.0026		
			2456.400	0.0011		
			2471.130	0.0015		
			2476.120	0.0018		
			2513.280	0.0047		
195 Pb	82	15.800 m	98.970	0.0078	0.8421	0.6625
			305.670	0.0091		
			313.220	0.0700		
			325.850	0.0066		
			383.640	1.0700		
			392.800	0.0070		
			394.210	0.4400		
			419.810	0.0063		
			428.440	0.0450		
			442.740	0.0082		
			511.000	0.1700		
			534.000	0.0053		
			534.110	0.0180		
			539.500	0.0130		
			607.640	0.0830		
			630.580	0.0330		
			672.600	0.0070		
			691.170	0.0290		
			707.670	0.1400		
			717.430	0.0056		
			734.430	0.0160		
			739.470	0.0038		
			742.190	0.0420		
			754.700	0.0084		
			801.260	0.0200		
			815.310	0.0250		
			821.300	0.0060		
			847.100	0.0070		
			848.660	0.0290		
			877.900	0.0090		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
195 Pb	82	15.800 m	878.400	0.2400	0.8421	0.6625
			912.740	0.0160		
			928.020	0.0390		
			937.860	0.0085		
			979.070	0.0150		
			1000.920	0.0140		
			1067.880	0.0630		
			1133.730	0.0081		
			1242.200	0.0033		
			1630.500	0.0098		
			1929.800	0.0116		
197 Pt m	78	1.573 h	52.950	0.0097	0.0292	0.0269
			130.000	0.0330		
			279.000	0.0327		
			346.500	0.1110		
197 Pt	78	18.300 h	77.350	0.1700	0.0099	0.0102
			191.437	0.0350		
			268.780	0.0027		
197 Au	79	7.800 s	77.350	0.0030	0.1151	0.1089
			130.420	0.0320		
			202.000	0.0120		
			279.010	0.7200		
			409.100	0.0011		
197 Hg m	80	23.800 h	130.420	0.0018	0.0293	0.0300
			133.880	0.3400		
			164.970	0.0032		
			279.010	0.0500		
197 Hg	80	2.671 d	77.352	0.1800	0.0068	0.0074
			191.364	0.0048		
197 Tl	81	0.540 s	222.450	0.3040	0.2365	0.2045
			385.000	0.9100		
197 Tl	81	2.840 h	133.990	0.0190	0.1628	0.1254
			152.150	0.0760		
			155.400	0.0012		
			173.800	0.0030		
			269.400	0.0058		
			277.500	0.0031		
			397.700	0.0012		
			405.000	0.0023		
			425.700	0.1200		
			432.900	0.0210		
			444.000	0.0046		
			451.400	0.0092		
			484.000	0.0022		
			511.000	0.0402		
			545.400	0.0011		
			578.000	0.0330		
			585.000	0.0076		
			639.900	0.0073		
			645.800	0.0012		
			674.200	0.0110		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
197 Tl	81	2.840 h	675.400	0.0065	0.1628	0.1254
			701.600	0.0084		
			758.600	0.0011		
			792.000	0.0120		
			857.200	0.0150		
			892.400	0.0079		
			901.000	0.0020		
			982.600	0.0089		
			1009.000	0.0028		
			1254.700	0.0059		
			1284.700	0.0061		
			1384.500	0.0090		
			1410.500	0.0330		
			1429.000	0.0059		
			1436.800	0.0043		
			1540.900	0.0016		
			1693.100	0.0048		
			1886.000	0.0017		
197 Pb	82	42.000 m	84.900	0.0540	0.5540	0.4562
			222.400	0.2500		
			234.400	0.0029		
			239.500	0.0460		
			252.900	0.1700		
			290.400	0.0100		
			307.700	0.0510		
			322.600	0.0100		
			366.000	0.0620		
			385.700	1.0000		
			387.700	0.3000		
			416.000	0.0210		
			558.000	0.0410		
			608.500	0.0410		
			695.000	0.1300		
			722.000	0.0310		
			773.000	0.1900		
198 Au m	79	2.300 d	97.210	0.7000	0.2377	0.2276
			180.310	0.5100		
			204.100	0.4200		
			214.890	0.7700		
			333.820	0.1500		
198 Au	79	2.696 d	411.794	0.9550	0.2311	0.1908
			675.873	0.0106		
			1087.663	0.0023		
198 Tl m	81	1.870 h	47.740	0.0024	0.6442	0.5015
			149.300	0.0015		
			194.600	0.0075		
			215.600	0.0120		
			226.200	0.0520		
			227.500	0.0140		
			249.800	0.0031		
			259.600	0.0290		
			260.900	0.0130		
			274.000	0.0150		
			282.800	0.2800		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
198 Tl m	81	1.870 h	292.700	0.0021	0.6442	0.5015
			375.900	0.0076		
			390.400	0.0160		
			411.800	0.5600		
			422.200	0.0087		
			423.300	0.0106		
			441.800	0.0220		
			489.600	0.0440		
			511.000	0.0186		
			519.200	0.0350		
			531.600	0.0051		
			541.000	0.0077		
			567.000	0.0021		
			587.200	0.5100		
			606.000	0.0027		
			636.700	0.5600		
			698.000	0.0076		
			744.200	0.0031		
			767.300	0.0110		
			832.900	0.0044		
			898.500	0.0083		
			1050.200	0.0025		
			1281.500	0.0036		
			1392.000	0.0038		
198 Tl	81	5.300 h	234.800	0.0045	0.9616	0.7267
			238.300	0.0025		
			331.600	0.0059		
			370.800	0.0029		
			376.800	0.0020		
			411.800	0.8200		
			437.200	0.0019		
			449.000	0.0012		
			480.800	0.0041		
			497.900	0.0022		
			511.000	0.0105		
			511.000	0.0155		
			513.600	0.0026		
			525.900	0.0033		
			550.200	0.0010		
			564.000	0.0031		
			587.200	0.0020		
			596.800	0.0100		
			636.700	0.1010		
			664.500	0.0013		
			675.800	0.1090		
			704.400	0.0017		
			745.000	0.0013		
			758.000	0.0039		
			759.600	0.0145		
			771.200	0.0015		
			786.300	0.0028		
			789.600	0.0049		
			798.700	0.0107		
			810.400	0.0017		
			853.000	0.0014		
			876.800	0.0027		
			922.700	0.0020		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
198 Tl	81	5.300 h	941.400	0.0062	0.9616	0.7267
			989.700	0.0072		
			1007.600	0.0270		
			1045.000	0.0021		
			1045.500	0.0046		
			1066.300	0.0022		
			1087.600	0.0240		
			1090.300	0.0070		
			1131.700	0.0023		
			1136.800	0.0037		
			1145.000	0.0022		
			1200.600	0.0970		
			1208.700	0.0041		
			1219.200	0.0108		
			1232.600	0.0021		
			1244.000	0.0032		
			1273.100	0.0036		
			1312.200	0.0470		
			1363.900	0.0032		
			1368.200	0.0022		
			1416.800	0.0033		
			1420.600	0.0800		
			1435.400	0.0350		
			1447.000	0.0430		
			1475.000	0.0022		
			1476.500	0.0024		
			1487.500	0.0034		
			1489.600	0.0260		
			1515.000	0.0021		
			1548.400	0.0011		
			1559.000	0.0092		
			1593.600	0.0210		
			1595.600	0.0035		
			1612.500	0.0096		
			1636.800	0.0026		
			1643.500	0.0032		
			1659.100	0.0169		
			1697.300	0.0022		
			1720.800	0.0280		
			1758.600	0.0045		
			1765.800	0.0098		
			1797.400	0.0050		
			1832.600	0.0430		
			1856.000	0.0048		
			1859.000	0.0077		
			1875.300	0.0066		
			1899.300	0.0220		
			1908.500	0.0014		
			1949.100	0.0012		
			2040.200	0.0840		
			2053.700	0.0017		
			2074.300	0.0058		
			2152.600	0.0052		
			2168.700	0.0015		
			2190.500	0.0270		
			2209.200	0.0041		
			2283.000	0.0049		
			2287.500	0.0044		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
198 Tl	81	5.300 h	2319.500	0.0015	0.9616	0.7267
			2370.900	0.0053		
			2413.700	0.0034		
			2423.700	0.0022		
			2465.400	0.0062		
			2486.200	0.0112		
			2564.300	0.0012		
			2601.400	0.0023		
			2612.600	0.0022		
			2782.800	0.0044		
			2825.600	0.0012		
198 Pb	82	2.400 h	116.900	0.0120	0.2009	0.1741
			122.600	0.0011		
			138.300	0.0015		
			173.400	0.1800		
			259.500	0.0580		
			266.700	0.0086		
			275.400	0.0040		
			290.300	0.3600		
			365.400	0.1900		
			382.000	0.0560		
			389.500	0.0054		
			396.500	0.0022		
			397.700	0.0290		
			467.800	0.0072		
			575.000	0.0310		
			605.900	0.0060		
			649.000	0.0180		
			743.000	0.0150		
			865.300	0.0590		
198 Bi	83	7.700 s	248.500	0.3900	0.0529	0.0472
199 Pt m	78	13.600 s	32.000	0.0420	0.1937	0.1625
			391.930	0.8500		
199 Pt	78	30.800 m	77.200	0.0150	0.1097	0.0863
			185.790	0.0330		
			191.690	0.0240		
			219.360	0.0039		
			225.880	0.0017		
			240.010	0.0018		
			246.460	0.0220		
			317.030	0.0490		
			323.600	0.0025		
			417.610	0.0039		
			425.340	0.0017		
			465.760	0.0093		
			468.090	0.0099		
			474.680	0.0115		
			493.750	0.0570		
			542.980	0.1480		
			714.550	0.0190		
			791.740	0.0107		
			968.320	0.0110		
199 Au	79	4.400E-04 s	55.150	0.0034	0.2763	0.2129

Nuclide	Z	Half Life	Energy keV	Yield	R*m2/h/Ci	Rem/h/Ci
199 Au	79	4.400E-04 s	493.750	0.9700	0.2763	0.2129
199 Au	79	3.139 d	49.825	0.0033	0.0380	0.0376
			158.375	0.3690		
			208.201	0.0840		
199 Hg	80	42.600 m	158.375	0.5300	0.0708	0.0673
			374.100	0.1390		
199 Tl	81	0.028 s	353.000	0.0390	0.3597	0.3114
			367.000	0.8500		
			382.400	0.7600		
			720.000	0.0190		
199 Tl	81	7.420 h	49.825	0.0048	0.0948	0.0791
			158.360	0.0490		
			195.300	0.0026		
			208.201	0.1200		
			247.260	0.0900		
			284.090	0.0220		
			297.070	0.0034		
			333.930	0.0170		
			336.500	0.0014		
			346.890	0.0013		
			403.400	0.0150		
			413.850	0.0020		
			455.460	0.1200		
			492.300	0.0150		
			542.210	0.0026		
			750.400	0.0100		
			817.670	0.0041		
			1012.950	0.0170		
			1062.800	0.0025		
199 Pb m	82	12.200 m	424.100	0.1750	0.0426	0.0348
199 Pb	82	1.500 h	240.800	0.0023	0.7248	0.5577
			267.600	0.0057		
			319.200	0.0013		
			353.390	0.1390		
			361.400	0.0049		
			366.900	0.6500		
			390.300	0.0025		
			400.540	0.0190		
			430.900	0.0029		
			433.200	0.0025		
			476.900	0.0026		
			494.890	0.0054		
			503.150	0.0016		
			510.900	0.0240		
			511.000	0.0212		
			521.280	0.0061		
			574.980	0.0015		
			685.200	0.0014		
			720.240	0.0950		
			724.500	0.0016		
			735.400	0.0016		
			753.920	0.0230		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
199 Pb	82	1.500 h	761.980	0.0330	0.7248	0.5577
			777.200	0.0044		
			781.480	0.0270		
			833.830	0.0027		
			838.680	0.0131		
			874.770	0.0240		
			911.800	0.0054		
			937.890	0.0310		
			995.600	0.0017		
			1005.130	0.0200		
			1029.210	0.0240		
			1048.090	0.0043		
			1052.660	0.0041		
			1115.100	0.0093		
			1121.000	0.0220		
			1135.040	0.1150		
			1161.270	0.0126		
			1170.700	0.0045		
			1187.230	0.0068		
			1209.600	0.0038		
			1215.200	0.0015		
			1239.120	0.0310		
			1265.400	0.0026		
			1291.500	0.0045		
			1311.280	0.0057		
			1325.700	0.0027		
			1328.300	0.0027		
			1358.600	0.0051		
			1382.710	0.0420		
			1401.940	0.0148		
			1481.200	0.0020		
			1502.040	0.0310		
			1506.200	0.0031		
			1517.120	0.0068		
			1524.100	0.0024		
			1531.230	0.0075		
			1553.300	0.0012		
			1563.300	0.0011		
			1592.580	0.0039		
			1602.610	0.0060		
			1610.670	0.0084		
			1631.800	0.0013		
			1647.200	0.0016		
			1658.430	0.0820		
			1695.280	0.0049		
			1749.700	0.0340		
			1768.480	0.0033		
			1793.100	0.0033		
			1840.000	0.0012		
			1859.300	0.0019		
			1891.300	0.0059		
			1898.700	0.0012		
			1930.690	0.0016		
			1978.500	0.0011		
			2000.610	0.0027		
			2019.600	0.0014		
			2031.400	0.0034		
			2042.600	0.0019		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
199 Pb	82	1.500 h	2046.300	0.0019	0.7248	0.5577
			2062.500	0.0015		
			2078.400	0.0015		
			2090.200	0.0024		
			2206.500	0.0012		
			2237.290	0.0090		
			2341.600	0.0022		
			2361.900	0.0013		
			2367.000	0.0012		
			2399.200	0.0012		
			2433.100	0.0022		
199 Po m	84	4.200 m	274.200	0.0740	0.5294	0.3952
			499.800	0.2500		
			511.000	0.4017		
			1002.000	0.6000		
199 Po	84	5.200 m	187.700	0.0750	0.7233	0.5472
			229.100	0.0480		
			233.500	0.0550		
			246.000	0.0420		
			260.700	0.0400		
			361.600	0.2200		
			397.800	0.0420		
			474.900	0.0700		
			506.800	0.0370		
			511.000	0.4259		
			998.400	0.1540		
			1021.400	0.2420		
			1034.400	0.4700		
200 Pt	78	12.500 h	43.670	0.0080	0.0208	0.0201
			60.000	0.0230		
			76.200	0.1340		
			97.520	0.0013		
			103.600	0.0103		
			135.940	0.0320		
			137.680	0.0023		
			146.540	0.0049		
			150.610	0.0025		
			166.000	0.0051		
			167.370	0.0038		
			189.400	0.0011		
			200.000	0.0067		
			227.450	0.0206		
			243.710	0.0250		
			292.660	0.0027		
			303.700	0.0016		
			313.970	0.0013		
			330.280	0.0110		
			390.200	0.0030		
			468.720	0.0026		
200 Au	79	48.400 m	367.900	0.1900	0.1421	0.1100
			661.370	0.0039		
			885.880	0.0014		
			1147.170	0.0012		
			1202.410	0.0018		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/
200 Au	79	48.400 m	1225.410	0.1070	0.1421	0.110
			1262.890	0.0310		
			1273.510	0.0017		
			1514.900	0.0011		
			1570.330	0.0041		
			1593.180	0.0011		
			1604.350	0.0015		
			1630.930	0.0030		
200 Au m	79	18.700 h	60.080	0.0068	1.0933	0.860
			84.300	0.0014		
			101.430	0.0016		
			105.420	0.0020		
			111.120	0.0180		
			120.280	0.0023		
			133.230	0.0067		
			137.300	0.0027		
			144.600	0.0023		
			146.070	0.0081		
			181.180	0.5500		
			218.510	0.0038		
			255.870	0.7100		
			332.800	0.0280		
			367.990	0.7710		
			497.770	0.7300		
			579.290	0.7200		
			759.500	0.6600		
			904.230	0.0770		
200 Tl	81	0.034 s	213.000	0.2300	0.3368	0.258
			539.000	1.0000		
200 Tl	81	1.087 d	116.510	0.0011	0.6641	0.514
			252.010	0.0028		
			289.350	0.0051		
			309.180	0.0026		
			367.942	0.8720		
			387.300	0.0016		
			476.820	0.0032		
			511.000	0.0071		
			521.400	0.0025		
			579.280	0.1380		
			591.650	0.0029		
			612.080	0.0024		
			628.630	0.0100		
			661.350	0.0228		
			689.050	0.0011		
			701.560	0.0129		
			711.750	0.0027		
			783.600	0.0057		
			787.100	0.0103		
			828.320	0.1080		
			886.150	0.0202		
			898.520	0.0062		
			1147.120	0.0012		
			1167.100	0.0010		
			1180.500	0.0011		
			1202.370	0.0011		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
200 Tl	81	1.087 d	1205.700	0.2990	0.6641	0.5141
			1225.500	0.0336		
			1254.110	0.0093		
			1262.970	0.0078		
			1273.520	0.0331		
			1291.110	0.0060		
			1350.350	0.0015		
			1362.900	0.0340		
			1366.300	0.0090		
			1407.640	0.0145		
			1477.780	0.0015		
			1514.900	0.0400		
			1570.600	0.0027		
			1604.500	0.0117		
			1718.350	0.0033		
			1759.150	0.0014		
			1906.300	0.0011		
200 Pb	82	21.500 h	109.540	0.0048	0.0646	0.0609
			142.290	0.0316		
			147.620	0.3770		
			161.350	0.0030		
			235.620	0.0430		
			257.170	0.0446		
			268.380	0.0396		
			289.110	0.0110		
			289.940	0.0170		
			302.890	0.0017		
			315.380	0.0022		
			348.230	0.0016		
			450.530	0.0333		
			457.700	0.0012		
			525.540	0.0042		
			605.440	0.0056		
200 Bi m	83	31.000 m	245.300	0.0440	0.7723	0.5787
			273.000	0.0043		
			418.200	0.2030		
			462.400	0.3560		
			511.000	0.3800		
			712.700	0.0154		
			1026.800	0.8500		
			1739.500	0.0368		
200 Bi	83	36.400 m	83.800	0.0041	1.2618	0.9713
			98.100	0.0030		
			103.250	0.0130		
			114.400	0.0120		
			201.110	0.0090		
			245.150	0.4600		
			273.390	0.0120		
			294.400	0.0090		
			303.410	0.0220		
			344.600	0.0050		
			348.330	0.0250		
			353.600	0.0040		
			419.770	0.9100		
			462.340	0.9800		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
200 Bi	83	36.400 m	480.300	0.0230	1.2618	0.9713
			494.300	0.0120		
			511.000	0.1040		
			539.200	0.0170		
			545.500	0.0450		
			642.700	0.0080		
			647.800	0.0260		
			781.000	0.0200		
			788.700	0.0100		
			811.000	0.0070		
			836.900	0.0150		
			902.600	0.0100		
			931.600	0.0260		
			935.100	0.0140		
			979.800	0.0070		
			992.900	0.0290		
			1026.490	1.0000		
			1101.400	0.0100		
200 Po	84	1.900E-07 s	484.000	1.0000	1.0130	0.7547
			611.000	1.0000		
			668.000	1.0000		
200 Po	84	11.500 m	53.300	0.0095	0.5294	0.3945
			102.300	0.0017		
			145.400	0.0126		
			147.600	0.0450		
			151.800	0.0024		
			154.400	0.0034		
			205.000	0.0150		
			225.100	0.0092		
			260.300	0.0068		
			272.600	0.0037		
			328.100	0.0262		
			395.400	0.0041		
			421.900	0.0136		
			430.300	0.0480		
			434.400	0.0930		
			488.400	0.0034		
			511.000	0.0918		
			551.500	0.0197		
			575.100	0.0041		
			582.000	0.0054		
			590.200	0.0099		
			599.700	0.0041		
			617.700	0.1970		
			662.600	0.0112		
			671.000	0.3400		
			692.000	0.0065		
			694.800	0.0550		
			720.800	0.0082		
			730.500	0.0105		
			756.000	0.0068		
			777.500	0.0051		
			796.700	0.0790		
			818.800	0.0058		
			850.000	0.0490		
			876.500	0.0180		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
200 Po	84	11.500 m	895.900	0.0146	0.5294	0.3945
			914.700	0.0116		
			919.000	0.0027		
			932.000	0.0078		
			945.700	0.0109		
			1003.300	0.0082		
			1084.600	0.0381		
			1106.800	0.0065		
			1145.700	0.0034		
			1165.200	0.0065		
			1173.000	0.0109		
			1271.300	0.0058		
			1285.800	0.0116		
			1387.800	0.0102		
			1398.500	0.0037		
			1408.600	0.0054		
			1438.400	0.0037		
			1560.600	0.0051		
			1651.700	0.0065		
			1750.400	0.0078		
			1802.100	0.0126		
201 Au	79	26.400 m	30.600	0.0012	0.0292	0.0223
			32.190	0.0014		
			135.300	0.0034		
			167.440	0.0101		
			352.300	0.0036		
			385.100	0.0065		
			438.200	0.0032		
			517.000	0.0132		
			521.000	0.0055		
			526.900	0.0071		
			542.600	0.0190		
			552.800	0.0084		
			613.200	0.0122		
			645.000	0.0067		
			732.300	0.0044		
201 Hg	80	9.400E-05 s	218.900	0.1950	0.3248	0.2501
			521.050	1.0050		
201 Tl	81	0.002 s	225.000	0.0435	0.4628	0.3732
			331.100	0.8700		
			588.000	0.8700		
201 Tl	81	3.046 d	30.600	0.0022	0.0105	0.0102
			32.190	0.0022		
			135.340	0.0265		
			165.880	0.0016		
			167.430	0.1000		
201 Pb m	82	1.017 m	620.000	0.5430	0.1935	0.1423
201 Pb	82	9.400 h	58.920	0.0072	0.3789	0.3093
			129.920	0.0011		
			155.310	0.0014		
			231.850	0.0010		
			241.020	0.0017		

Nuclide	Z	Half Life	Energy keV	Yield	F R*m2/h/Ci	T Rem/h/Ci
201 Pb	82	9.400 h	285.040	0.0016	0.3789	0.3093
			331.170	0.7900		
			341.520	0.0010		
			345.040	0.0029		
			361.270	0.0990		
			381.380	0.0023		
			394.930	0.0017		
			406.030	0.0201		
			450.390	0.0010		
			464.950	0.0036		
			510.700	0.0010		
			514.380	0.0017		
			540.960	0.0026		
			546.290	0.0027		
			573.200	0.0011		
			584.550	0.0356		
			597.580	0.0032		
			637.970	0.0043		
			692.370	0.0427		
			708.750	0.0077		
			727.530	0.0014		
			753.350	0.0015		
			767.280	0.0316		
			787.290	0.0059		
			803.660	0.0151		
			826.210	0.0236		
			907.560	0.0570		
			945.960	0.0740		
			946.800	0.0047		
			999.230	0.0064		
			1069.950	0.0114		
			1088.800	0.0086		
			1098.510	0.0183		
			1114.720	0.0017		
			1148.750	0.0076		
			1157.550	0.0013		
			1238.760	0.0118		
			1277.130	0.0163		
			1308.410	0.0055		
			1340.770	0.0043		
			1401.290	0.0013		
			1479.890	0.0016		
201 Bi m	83	60.000 m	511.000	0.3720	0.1570	0.1181
			846.000	0.1000		
201 Bi	83	1.800 h	628.800	0.5000	0.6948	0.5078
			735.900	0.3000		
			901.500	0.2000		
			935.700	0.1900		
			1013.800	0.1350		
			1325.500	0.1600		
201 Po	84	8.900 m	272.700	0.0460	0.4285	0.3227
			412.400	0.2500		
			417.900	0.0660		
			511.000	0.1680		
			967.000	0.5600		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
201 Po	84	15.300 m	205.600	0.0800	0.7273	0.5427
			223.000	0.0550		
			224.900	0.1200		
			239.000	0.0810		
			428.400	0.0890		
			511.000	0.2980		
			537.400	0.0550		
			552.100	0.0630		
			639.100	0.0540		
			848.400	0.1350		
			890.400	0.5400		
			904.700	0.2900		
			1163.800	0.0370		
			1206.100	0.0330		
201 At	85	1.483 m	511.000	0.2494	0.0735	0.0561
202 Au	79	28.000 s	388.100	0.0100	0.0869	0.0658
			439.560	0.1000		
			520.300	0.0110		
			786.300	0.0059		
			908.600	0.0180		
			959.700	0.0014		
			1125.400	0.0250		
			1203.700	0.0210		
			1306.500	0.0230		
202 Tl	81	12.230 d	439.560	0.9140	0.2344	0.1883
			520.130	0.0090		
			959.700	0.0012		
202 Pb	82	3.620 h	124.750	0.0055	1.1115	0.8334
			148.800	0.0022		
			211.920	0.0075		
			240.300	0.0025		
			241.100	0.0084		
			335.550	0.0022		
			389.940	0.0620		
			417.300	0.0040		
			422.120	0.8600		
			459.720	0.0860		
			490.470	0.0910		
			547.400	0.0012		
			601.950	0.0060		
			557.490	0.3240		
			786.990	0.4980		
			954.500	0.0100		
			960.700	0.9200		
202 Bi	83	1.670 h	80.750	0.0075	1.4255	1.0681
			97.580	0.0024		
			125.210	0.0119		
			158.160	0.0035		
			168.110	0.0480		
			195.630	0.0029		
			204.750	0.0027		
			216.000	0.0023		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R²m2/h/Ci	T Rem/h/Ci
202 3i	83	1.670 h	222.790	0.0069	1.4255	1.0681
			232.060	0.0034		
			240.180	0.0450		
			248.920	0.0307		
			285.580	0.0022		
			291.930	0.0026		
			320.140	0.0312		
			342.040	0.0043		
			346.470	0.0460		
			348.770	0.0060		
			358.050	0.0030		
			369.270	0.0050		
			386.860	0.0014		
			412.270	0.0029		
			417.250	0.0042		
			422.130	0.8370		
			438.220	0.0155		
			504.230	0.0028		
			511.000	0.0613		
			514.420	0.0162		
			529.610	0.0041		
			532.340	0.0044		
			534.700	0.0017		
			569.270	0.0480		
			578.560	0.0730		
			582.330	0.0096		
			591.500	0.0014		
			599.300	0.0053		
			632.000	0.0018		
			644.440	0.0067		
			657.490	0.6060		
			662.550	0.0131		
			666.600	0.0084		
			671.010	0.0045		
			676.190	0.0190		
			690.330	0.0019		
			702.200	0.0100		
			705.600	0.0022		
			714.630	0.0027		
			717.100	0.0017		
			763.850	0.0055		
			768.570	0.0068		
			783.540	0.0033		
			788.400	0.0074		
			802.250	0.0042		
			825.400	0.0022		
			852.570	0.0228		
			858.420	0.0164		
			871.300	0.0014		
			876.210	0.0106		
			899.000	0.0034		
			904.240	0.0030		
			915.200	0.0015		
			927.280	0.0710		
			942.070	0.0119		
			954.470	0.0780		
			960.670	0.9928		
			983.630	0.0088		

Nuclide	Z	Half Life	Energy keV	Yield	R*m2/h/Ci	Rem/h/Ci
202 Bi	83	1.670 h	997.900	0.0030	1.4255	1.0681
			1004.440	0.0085		
			1035.190	0.0050		
			1052.860	0.0031		
			1062.840	0.0014		
			1072.590	0.0083		
			1103.630	0.0038		
			1108.700	0.0019		
			1111.820	0.0024		
			1117.400	0.0017		
			1127.450	0.0032		
			1134.330	0.0021		
			1144.270	0.0050		
			1150.710	0.0040		
			1163.500	0.0018		
			1164.900	0.0016		
			1173.620	0.0015		
			1197.530	0.0020		
			1206.250	0.0058		
			1211.520	0.0022		
			1224.200	0.0156		
			1226.700	0.0045		
			1236.080	0.0059		
			1245.480	0.0279		
			1295.350	0.0020		
			1313.590	0.0018		
			1336.500	0.0026		
			1350.850	0.0040		
			1358.550	0.0040		
			1363.140	0.0020		
			1367.500	0.0050		
			1375.430	0.0016		
			1420.720	0.0060		
			1433.440	0.0029		
			1439.170	0.0016		
			1487.100	0.0022		
			1495.080	0.0016		
			1512.800	0.0025		
			1515.890	0.0072		
			1523.680	0.0027		
			1526.900	0.0017		
			1556.690	0.0190		
			1563.350	0.0018		
			1584.900	0.0069		
			1586.200	0.0069		
			1615.250	0.0016		
			1619.650	0.0023		
			1623.340	0.0018		
			1635.550	0.0017		
			1695.000	0.0014		
			1730.900	0.0030		
			1754.100	0.0018		
			1757.500	0.0037		
			1780.530	0.0068		
			1790.550	0.0026		
			1807.950	0.0040		
			1813.700	0.0015		
			1833.250	0.0028		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
202 Bi	83	1.670 h	1848.730	0.0020	1.4255	1.0681
			1858.800	0.0015		
			1882.220	0.0028		
			1956.970	0.0036		
			1989.750	0.0021		
			1998.360	0.0011		
			2059.500	0.0036		
			2100.500	0.0020		
			2153.210	0.0020		
			2277.280	0.0016		
			2322.550	0.0022		
			2340.500	0.0020		
			2559.600	0.0011		
			2660.860	0.0012		
			2966.900	0.0012		
			3210.770	0.0012		
			3316.540	0.0013		
202 Po	84	44.700 m	41.200	0.0300	0.4578	0.3448
			65.200	0.0200		
			165.700	0.0870		
			213.700	0.0340		
			215.900	0.0163		
			251.700	0.0153		
			316.000	0.1430		
			336.700	0.0200		
			427.700	0.0163		
			458.400	0.0350		
			506.300	0.0440		
			551.400	0.0178		
			597.900	0.0260		
			625.100	0.0170		
			643.700	0.0360		
			688.600	0.5100		
			712.000	0.0460		
			717.200	0.0610		
			785.500	0.0200		
			790.500	0.0720		
			808.500	0.0158		
			828.500	0.0190		
			973.800	0.0490		
			1168.600	0.0200		
			1215.000	0.0170		
202 At	85	3.017 m	441.300	0.4100	0.9692	0.7276
			511.000	0.8976		
			569.700	0.8100		
			675.300	0.8660		
203 Au	79	53.000 s	690.000	0.1000	0.0394	0.0288
203 Hg	80	46.600 d	279.190	0.8150	0.1264	0.1194
203 Pb	82	0.480 s	153.400	0.0540	1.0640	0.8006
			173.900	0.0130		
			217.400	0.0090		
			231.900	0.0150		
			238.500	0.0490		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
203 Pb	82	0.480 s	239.600	0.1000	1.0640	0.8006
			258.500	0.8300		
			280.200	0.0400		
			453.800	0.0100		
			634.300	0.2050		
			678.100	0.0370		
			838.600	1.0000		
			851.900	0.0430		
			873.900	0.5100		
			1027.200	0.1470		
203 Pb m	82	6.300 s	820.200	0.0640	0.3604	0.2619
			825.200	0.7140		
203 Pb	82	2.169 d	279.189	0.8010	0.1349	0.1259
			401.315	0.0344		
			680.502	0.0070		
203 Bi	83	11.760 h	59.990	0.0033	1.1563	0.8527
			126.460	0.0120		
			136.780	0.0025		
			186.600	0.0311		
			212.520	0.0027		
			252.220	0.0010		
			264.200	0.0520		
			271.120	0.0014		
			299.340	0.0012		
			322.000	0.0015		
			331.290	0.0021		
			337.880	0.0017		
			339.720	0.0016		
			349.130	0.0013		
			375.000	0.0035		
			378.000	0.0029		
			381.670	0.0128		
			392.520	0.0033		
			406.300	0.0037		
			421.800	0.0038		
			432.540	0.0013		
			462.150	0.0017		
			468.760	0.0023		
			483.800	0.0027		
			486.620	0.0012		
			490.240	0.0011		
			498.490	0.0066		
			501.400	0.0019		
			508.200	0.0016		
			511.000	0.0031		
			542.770	0.0023		
			547.000	0.0017		
			558.870	0.0016		
			569.290	0.0122		
			590.850	0.0013		
			595.270	0.0047		
			618.700	0.0036		
			621.000	0.0041		
			624.000	0.0017		
			626.730	0.0035		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
203 Bi	83	11.760 h	633.800	0.0137	1.1563	0.8527
			633.800	0.0133		
			647.000	0.0015		
			658.000	0.0022		
			665.000	0.0011		
			674.780	0.0010		
			697.360	0.0016		
			704.380	0.0014		
			719.000	0.0040		
			722.400	0.0480		
			740.000	0.0038		
			759.000	0.0027		
			768.800	0.0041		
			772.740	0.0021		
			779.900	0.0012		
			816.320	0.0403		
			820.200	0.2960		
			825.200	0.1460		
			847.180	0.0850		
			861.220	0.0013		
			866.470	0.0149		
			869.200	0.0049		
			871.000	0.0023		
			896.800	0.1310		
			904.130	0.0021		
			906.700	0.0025		
			911.700	0.0022		
			924.540	0.0020		
			927.680	0.0020		
			933.390	0.0144		
			936.000	0.0074		
			951.640	0.0023		
			982.320	0.0018		
			985.000	0.0031		
			995.130	0.0015		
			1000.300	0.0098		
			1006.880	0.0011		
			1024.250	0.0012		
			1033.730	0.0880		
			1044.000	0.0024		
			1058.770	0.0010		
			1068.290	0.0060		
			1070.120	0.0070		
			1074.700	0.0029		
			1087.750	0.0039		
			1091.730	0.0017		
			1096.620	0.0012		
			1112.000	0.0072		
			1120.240	0.0072		
			1124.000	0.0030		
			1143.800	0.0010		
			1151.490	0.0014		
			1153.450	0.0020		
			1166.860	0.0016		
			1177.000	0.0011		
			1184.350	0.0049		
			1188.160	0.0013		
			1198.550	0.0202		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
203 Bi	83	11.760 h	1203.000	0.0154	1.1563	0.8527
			1206.170	0.0015		
			1214.260	0.0022		
			1223.700	0.0073		
			1228.360	0.0022		
			1246.000	0.0053		
			1253.830	0.0123		
			1261.860	0.0012		
			1303.290	0.0049		
			1307.540	0.0017		
			1311.000	0.0012		
			1337.260	0.0037		
			1343.350	0.0017		
			1350.330	0.0011		
			1365.500	0.0012		
			1370.000	0.0036		
			1374.180	0.0011		
			1381.270	0.0028		
			1385.600	0.0038		
			1395.550	0.0031		
			1407.880	0.0094		
			1410.000	0.0071		
			1417.000	0.0019		
			1421.000	0.0025		
			1431.000	0.0012		
			1438.000	0.0064		
			1464.750	0.0061		
			1469.200	0.0043		
			1496.150	0.0054		
			1506.700	0.0370		
			1510.430	0.0035		
			1536.500	0.0750		
			1550.620	0.0077		
			1552.550	0.0148		
			1562.500	0.0014		
			1576.000	0.0014		
			1589.340	0.0020		
			1592.660	0.0109		
			1608.380	0.0012		
			1634.000	0.0065		
			1646.760	0.0010		
			1679.600	0.0880		
			1716.330	0.0055		
			1719.600	0.0340		
			1739.000	0.0025		
			1743.500	0.0025		
			1748.480	0.0189		
			1770.720	0.0051		
			1787.600	0.0019		
			1800.000	0.0092		
			1802.300	0.0092		
			1816.350	0.0040		
			1842.000	0.0049		
			1847.300	0.1140		
			1856.490	0.0029		
			1888.000	0.0194		
			1893.000	0.0820		
			1908.170	0.0034		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
203 Bi	83	11.760 h	1928.160	0.0112	1.1563	0.8527
			1930.880	0.0016		
			1939.300	0.0013		
			1983.140	0.0088		
			1991.000	0.0012		
			2000.700	0.0083		
			2011.390	0.0176		
			2078.230	0.0047		
			2113.180	0.0012		
			2118.240	0.0017		
			2144.160	0.0023		
			2181.640	0.0014		
			2224.780	0.0017		
			2331.570	0.0033		
			2429.000	0.0026		
203 Po m	84	1.200 m	261.500	0.0053	0.2226	0.1634
			511.000	0.0141		
			577.000	0.0240		
			640.900	0.5100		
			904.900	0.0440		
203 Po	84	36.700 m	140.200	0.0028	0.8368	0.6194
			175.200	0.0300		
			182.300	0.0011		
			189.500	0.0390		
			197.400	0.0056		
			204.700	0.0050		
			214.800	0.1450		
			261.800	0.0120		
			389.900	0.0112		
			419.300	0.0250		
			443.400	0.0028		
			486.100	0.0213		
			511.000	0.1381		
			647.700	0.0207		
			743.000	0.0062		
			799.000	0.0062		
			822.900	0.0241		
			883.500	0.0200		
			893.500	0.1900		
			908.600	0.5600		
			918.100	0.0084		
			955.300	0.0034		
			973.900	0.0050		
			1037.700	0.0028		
			1090.900	0.1960		
			1096.000	0.0078		
			1123.900	0.0162		
			1133.100	0.0056		
			1138.100	0.0017		
			1150.100	0.0022		
			1178.200	0.0034		
			1188.700	0.0022		
			1201.600	0.0022		
			1242.400	0.0470		
			1264.000	0.0095		
			1277.100	0.0062		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
203 Po	84	36.700 m	1307.200	0.0028	0.8368	0.6194
			1314.500	0.0050		
			1337.900	0.0300		
			1352.900	0.0140		
			1416.700	0.0039		
			1419.500	0.0017		
			1466.000	0.0039		
			1475.700	0.0062		
			1490.300	0.0045		
			1511.400	0.0045		
			1552.200	0.0045		
			1568.500	0.0056		
			1598.500	0.0050		
			1601.700	0.0022		
			1615.300	0.0022		
			1622.200	0.0050		
			1658.100	0.0050		
			1666.300	0.0022		
			1673.000	0.0050		
			1716.200	0.0034		
			1758.300	0.0011		
			1780.700	0.0067		
			1795.900	0.0056		
			1804.900	0.0022		
			1817.500	0.0106		
			1830.100	0.0028		
			1914.200	0.0011		
			1930.800	0.0090		
			1936.200	0.0017		
			1960.400	0.0011		
			1970.700	0.0017		
			1991.000	0.0011		
			2029.500	0.0056		
			2032.500	0.0039		
			2086.800	0.0022		
			2189.400	0.0011		
			2197.700	0.0022		
			2236.900	0.0056		
			2373.700	0.0022		
			2477.700	0.0011		
			2529.500	0.0017		
			2728.800	0.0011		
			2916.400	0.0022		
			2952.200	0.0017		
203 At	85	7.370 m	145.800	0.0970	1.7579	1.3067
			152.100	0.0340		
			154.700	0.0280		
			204.400	0.0340		
			206.600	0.0620		
			245.900	0.3280		
			361.600	0.1590		
			390.300	0.0560		
			416.900	0.0990		
			487.300	0.0410		
			531.900	0.1260		
			608.800	0.1410		
			639.300	0.6700		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
203 At	85	7.370 m	641.400	0.3700	1.7579	1.3067
			656.200	0.2040		
			737.900	0.2870		
			845.800	0.2070		
			880.400	0.2810		
			1002.000	0.5900		
			1034.000	0.6900		
205 Hg	80	5.200 m	203.740	0.0220	0.0024	0.0022
205 Pb	82	0.006 s	284.200	0.1000	0.5355	0.3941
			310.400	0.0060		
			703.400	0.1500		
			987.700	0.8442		
			1013.800	0.0051		
205 Bi	83	15.310 d	90.040	0.0011	0.8184	0.6035
			260.500	0.0109		
			262.800	0.0036		
			282.380	0.0043		
			284.150	0.0169		
			310.350	0.0010		
			349.550	0.0056		
			493.650	0.0037		
			511.000	0.0022		
			511.500	0.0086		
			549.840	0.0295		
			570.600	0.0434		
			573.850	0.0062		
			576.300	0.0019		
			579.800	0.0544		
			526.710	0.0058		
			688.500	0.0023		
			701.160	0.0016		
			703.450	0.3110		
			704.860	0.0038		
			717.370	0.0031		
			720.650	0.0014		
			723.570	0.0015		
			744.700	0.0070		
			757.090	0.0012		
			759.100	0.0104		
			761.350	0.0068		
			780.920	0.0057		
			795.670	0.0014		
			800.800	0.0019		
			806.550	0.0016		
			813.750	0.0047		
			828.220	0.0029		
			860.130	0.0043		
			871.950	0.0042		
			890.150	0.0068		
			894.560	0.0062		
			901.900	0.0013		
			910.900	0.0164		
			950.840	0.0039		
			971.560	0.0028		
			987.660	0.1613		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
205 Bi	83	15.310 d	1001.590	0.0026	0.8184	0.6035
			1001.950	0.0027		
			1014.300	0.0091		
			1038.860	0.0011		
			1043.750	0.0751		
			1066.030	0.0011		
			1072.400	0.0030		
			1190.030	0.0226		
			1199.620	0.0019		
			1208.700	0.0051		
			1216.250	0.0010		
			1264.800	0.0012		
			1351.520	0.0106		
			1438.700	0.0012		
			1499.000	0.0017		
			1501.400	0.0023		
			1521.200	0.0020		
			1548.650	0.0028		
			1551.000	0.0097		
			1563.150	0.0017		
			1577.500	0.0017		
			1593.000	0.0012		
			1614.300	0.0228		
			1619.100	0.0037		
			1756.400	0.0022		
			1760.000	0.0012		
			1764.300	0.3250		
			1775.800	0.0399		
			1861.700	0.0617		
			1903.450	0.0247		
205 Po	84	1.800 h	128.900	0.0111	0.7999	0.5874
			150.400	0.0033		
			151.400	0.0133		
			158.400	0.0016		
			212.000	0.0360		
			222.500	0.0018		
			225.400	0.0013		
			248.200	0.0014		
			261.000	0.0400		
			335.000	0.0018		
			358.800	0.0018		
			381.800	0.0015		
			454.100	0.0018		
			473.100	0.0089		
			495.900	0.0015		
			511.000	0.0421		
			599.800	0.0262		
			614.200	0.0159		
			624.800	0.0103		
			679.900	0.0026		
			713.300	0.0059		
			715.200	0.0033		
			783.000	0.0022		
			795.900	0.0078		
			836.800	0.1920		
			849.800	0.2550		
			859.400	0.0019		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
205 Po	84	1.800 h	872.400	0.3700	0.7999	0.5874
			959.900	0.0022		
			1001.200	0.2880		
			1026.800	0.0011		
			1044.000	0.0063		
			1060.500	0.0011		
			1103.200	0.0015		
			1120.600	0.0011		
			1183.500	0.0122		
			1187.200	0.0011		
			1195.000	0.0022		
			1221.200	0.0011		
			1239.100	0.0460		
			1242.300	0.0037		
			1267.300	0.0022		
			1276.600	0.0011		
			1301.900	0.0022		
			1309.700	0.0011		
			1323.500	0.0048		
			1336.400	0.0133		
			1392.700	0.0055		
			1470.900	0.0015		
			1486.500	0.0015		
			1487.100	0.0015		
			1513.700	0.0211		
			1529.600	0.0022		
			1546.100	0.0026		
			1551.800	0.0292		
			1570.800	0.0015		
			1575.200	0.0078		
			1578.400	0.0063		
			1610.900	0.0026		
			1622.800	0.0015		
			1674.100	0.0026		
			1701.200	0.0022		
			1707.100	0.0048		
			1711.800	0.0018		
			1715.700	0.0030		
			1724.100	0.0033		
			1729.200	0.0155		
			1800.200	0.0015		
			1808.100	0.0011		
			1811.300	0.0118		
			1836.800	0.0011		
			1950.000	0.0018		
			1957.500	0.0026		
			2020.300	0.0015		
			2101.100	0.0018		
			2126.200	0.0022		
			2168.900	0.0037		
			2174.700	0.0022		
			2223.800	0.0026		
			2268.200	0.0015		
			2338.300	0.0011		
			2432.400	0.0011		
			2574.200	0.0018		
205 At	85	1.100E-07 s	125.000	0.1920	0.7631	0.6052

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
205 At	85	1.100E-07 s	191.000	0.1740	0.7631	0.6052
			332.000	0.5800		
			372.000	0.4200		
			469.000	0.3400		
			566.000	0.3500		
			638.000	0.2600		
			663.000	0.6200		
205 At	85	26.200 m	143.100	0.0081	0.3448	0.2564
			154.100	0.0250		
			160.800	0.0128		
			165.700	0.0025		
			178.600	0.0011		
			202.500	0.0033		
			230.100	0.0022		
			275.600	0.0014		
			311.200	0.0350		
			31[illegible]700	0.0042		
			31[illegible]300	0.0036		
			336.900	0.0020		
			361.100	0.0078		
			364.900	0.0053		
			384.600	0.0084		
			395.600	0.0039		
			448.700	0.0150		
			462.500	0.0050		
			487.800	0.0042		
			506.200	0.0014		
			516.400	0.0075		
			520.500	0.0370		
			529.000	0.0036		
			554.000	0.0045		
			577.100	0.0047		
			583.700	0.0025		
			587.200	0.0036		
			595.500	0.0028		
			617.700	0.0190		
			628.800	0.0470		
			659.400	0.0210		
			669.400	0.0840		
			672.700	0.0310		
			691.300	0.0031		
			719.300	0.2800		
			756.800	0.0045		
			782.900	0.0160		
			788.900	0.0110		
			792.200	0.0053		
			806.600	0.0047		
			872.200	0.0220		
			929.000	0.0033		
			942.100	0.0025		
			975.800	0.0070		
			1026.200	0.0084		
			1031.400	0.0210		
			1082.300	0.0047		
			1091.100	0.0022		
			1170.900	0.0059		
			1245.900	0.0031		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R²m2/h/Ci	T Rem/h/Ci
205 At	85	26.200 m	1252.000	0.0047	0.3448	0.2564
			1307.400	0.0086		
			1325.400	0.0117		
			1398.600	0.0061		
			1413.900	0.0028		
			1442.300	0.0028		
			1475.400	0.0061		
			1479.000	0.0061		
			1761.300	0.0042		
			2031.600	0.0028		
			2050.600	0.0064		
205 Rn	86	2.830 m	264.900	0.6500	0.3051	0.2438
			354.900	0.0240		
			464.500	0.1620		
			620.200	0.1620		
			675.000	0.1300		
			729.600	0.1300		
206 Hg	80	8.150 m	304.800	0.2700	0.0559	0.0510
			344.300	0.0057		
			649.500	0.0230		
206 Bi	83	6.243 d	184.020	0.1580	1.7220	1.2811
			234.260	0.0024		
			262.710	0.0302		
			313.670	0.0036		
			343.510	0.2340		
			386.200	0.0052		
			398.000	0.1074		
			452.840	0.0016		
			497.060	0.1531		
			516.180	0.4070		
			537.450	0.3040		
			576.360	0.0011		
			581.970	0.0049		
			620.480	0.0576		
			632.250	0.0447		
			657.160	0.0191		
			739.240	0.0016		
			754.960	0.0053		
			784.580	0.0054		
			803.100	0.9890		
			841.280	0.0019		
			881.010	0.6620		
			895.120	0.1566		
			1018.630	0.0760		
			1098.260	0.1350		
			1142.370	0.0011		
			1194.690	0.0028		
			1202.580	0.0011		
			1332.330	0.0028		
			1405.010	0.0143		
			1496.180	0.0018		
			1560.300	0.0038		
			1565.340	0.0030		
			1595.270	0.0501		
			1718.700	0.3180		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
206 Bi	83	6.243 d	1844.490	0.0057	1.7220	1.2811
			1878.650	0.0201		
			1903.560	0.0035		
			2599.600	0.0013		
206 Po	84	8.800 d	59.908	0.0123	0.6128	0.4687
			117.540	0.0013		
			140.490	0.0014		
			146.180	0.0011		
			170.501	0.0032		
			171.340	0.0010		
			180.791	0.0010		
			281.923	0.0084		
			286.410	0.2400		
			311.560	0.0420		
			322.810	0.0012		
			338.440	0.1920		
			354.870	0.0039		
			369.080	0.0017		
			381.220	0.0018		
			452.470	0.0032		
			457.760	0.0015		
			463.380	0.0179		
			468.980	0.0026		
			511.360	0.2400		
			522.470	0.1570		
			554.640	0.0156		
			579.780	0.0106		
			645.580	0.0035		
			668.750	0.0086		
			677.710	0.0147		
			693.810	0.0020		
			807.380	0.2300		
			818.230	0.0104		
			860.930	0.0350		
			902.530	0.0025		
			980.230	0.0710		
			1007.150	0.0310		
			1017.930	0.0036		
			1032.260	0.3300		
			1043.170	0.0029		
			1114.490	0.0029		
			1190.920	0.0047		
			1318.680	0.0065		
			1496.900	0.0025		
206 At	85	29.330 m	154.500	0.0049	1.3387	1.0130
			197.980	0.0156		
			201.840	0.0540		
			233.550	0.0310		
			256.530	0.0440		
			268.340	0.0127		
			275.590	0.0205		
			278.880	0.0260		
			317.300	0.0049		
			342.510	0.0146		
			373.410	0.0039		
			380.810	0.0078		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R²m2/h/Ci	T Rem/h/Ci
206 At	85	29.330 m	386.740	0.0260	1.3387	1.0130
			395.540	0.4800		
			399.980	0.0068		
			416.410	0.0127		
			444.730	0.0127		
			477.100	0.8600		
			498.500	0.0059		
			511.000	0.3513		
			527.270	0.0290		
			565.550	0.0320		
			599.330	0.0039		
			614.400	0.0610		
			700.660	0.9755		
			704.670	0.0600		
			709.320	0.0059		
			729.140	0.0020		
			729.270	0.0098		
			733.730	0.1010		
			738.030	0.0117		
			796.600	0.0117		
			802.500	0.0020		
			824.220	0.0127		
			868.270	0.0760		
			911.960	0.0059		
			923.120	0.0560		
			927.090	0.0098		
			939.250	0.0195		
			955.200	0.0146		
			960.920	0.0137		
			976.320	0.0137		
			1008.600	0.0176		
			1013.820	0.0290		
			1048.140	0.0224		
			1059.380	0.0340		
			1071.780	0.0020		
			1087.760	0.0068		
			1094.890	0.0068		
			1124.770	0.0185		
			1196.860	0.0146		
			1257.530	0.0117		
			1290.440	0.0068		
			1292.840	0.0068		
			1294.890	0.0068		
			1349.520	0.0068		
			1446.080	0.0127		
			1492.850	0.0020		
			1637.410	0.0117		
			1736.250	0.0088		
			1745.560	0.0068		
			1855.800	0.0039		
			1899.840	0.0049		
			1909.330	0.0059		
			1928.170	0.0068		
			1938.070	0.0127		
			2075.500	0.0039		
			2116.070	0.0049		
			2218.750	0.0049		
			2271.140	0.0029		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R²m2/h/Ci	Γ Rem/h/Ci
206 At	85	29.330 m	2298.750	0.0078	1.3387	1.0130
			2318.580	0.0049		
			2495.170	0.0020		
			2559.070	0.0039		
			2566.600	0.0020		
206 At	85	29.400 m	68.000	0.0015	0.0001	0.0001
206 Rn	86	5.670 m	52.000	0.0460	0.6221	0.5007
			97.200	0.0166		
			101.200	0.0115		
			134.200	0.0160		
			186.500	0.0220		
			195.500	0.0370		
			208.100	0.0840		
			213.400	0.0350		
			215.400	0.0130		
			290.900	0.0240		
			302.100	0.1700		
			324.500	0.3200		
			350.700	0.0410		
			371.100	0.1680		
			386.600	0.2000		
			436.300	0.0180		
			444.200	0.0900		
			458.500	0.0160		
			465.800	0.0118		
			482.800	0.1900		
			485.600	0.1000		
			497.700	0.3300		
			527.400	0.0800		
			536.600	0.0530		
			632.100	0.0480		
			643.200	0.0210		
			716.900	0.0220		
			738.500	0.0500		
			757.100	0.0340		
			773.100	0.1900		
			795.100	0.0320		
207 Tl	81	4.770 m	897.600	0.0024	0.0012	0.0009
207 Bi	83	1.820E-04 s	117.900	0.0250	1.0646	0.7969
			238.000	0.0250		
			262.200	0.2300		
			308.600	0.0250		
			405.000	0.0420		
			426.100	0.1400		
			456.100	0.4900		
			571.000	0.1600		
			669.500	0.6200		
			713.500	0.3900		
			743.300	0.3700		
			931.800	0.2900		
			975.600	0.0700		
			1240.900	0.0900		
207 Bi	83	38.026 y	569.670	0.9780	0.5092	0.5962

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
207 Bi	83	38.026 y	897.700	0.0015	0.8092	0.5962
			1063.620	0.7490		
			1442.200	0.0015		
			1770.230	0.0685		
207 Po m	84	2.800 s	268.200	0.4400	0.5740	0.4412
			300.700	0.3000		
			814.500	1.0000		
207 Po	84	5.833 h	99.800	0.0013	0.6865	0.5062
			158.000	0.0056		
			222.100	0.0126		
			222.700	0.0027		
			224.000	0.0020		
			249.600	0.0162		
			297.200	0.0101		
			307.500	0.0065		
			330.100	0.0023		
			345.200	0.0200		
			369.500	0.0193		
			405.700	0.1010		
			503.300	0.0018		
			511.000	0.0098		
			531.700	0.0060		
			629.800	0.0148		
			669.500	0.0050		
			687.600	0.0203		
			742.600	0.2920		
			770.700	0.0072		
			892.300	0.0043		
			911.800	0.1800		
			947.900	0.0108		
			992.300	0.6000		
			1020.000	0.0018		
			1148.300	0.0610		
			1211.300	0.0013		
			1360.400	0.0063		
			1372.400	0.0139		
			1377.000	0.0016		
			1586.000	0.0011		
			1662.500	0.0040		
			1762.700	0.0025		
			1846.800	0.0034		
			2060.000	0.0144		
207 At	85	1.800 h	168.000	0.0110	0.6600	0.4905
			191.300	0.0043		
			236.500	0.0073		
			286.800	0.0023		
			292.800	0.0027		
			300.700	0.0970		
			316.000	0.0013		
			324.500	0.0050		
			357.300	0.0183		
			365.500	0.0020		
			392.900	0.0047		
			411.200	0.0043		
			422.200	0.0137		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
207 At	85	1.800 h	456.800	0.0130	0.6600	0.4905
			459.700	0.0110		
			467.200	0.0530		
			498.400	0.0027		
			503.300	0.0020		
			519.600	0.0027		
			520.800	0.0057		
			529.900	0.0250		
			583.400	0.0153		
			588.400	0.1470		
			617.200	0.0113		
			626.800	0.0166		
			637.300	0.0173		
			641.100	0.0043		
			648.100	0.0330		
			658.400	0.0500		
			670.600	0.0280		
			675.300	0.0490		
			693.400	0.0160		
			721.200	0.0490		
			755.100	0.0047		
			764.900	0.0033		
			767.900	0.0017		
			789.700	0.0030		
			798.800	0.0020		
			814.500	0.3300		
			852.700	0.0020		
			862.400	0.0043		
			881.000	0.0067		
			907.300	0.0400		
			932.200	0.0023		
			954.800	0.0013		
			960.600	0.0166		
			994.000	0.0166		
			1015.700	0.0023		
			1021.500	0.0063		
			1042.300	0.0017		
			1054.100	0.0080		
			1077.600	0.0137		
			1086.900	0.0027		
			1115.200	0.0330		
			1131.800	0.0030		
			1171.800	0.0083		
			1174.500	0.0033		
			1188.400	0.0123		
			1193.700	0.0033		
			1225.800	0.0107		
			1242.800	0.0063		
			1245.700	0.0043		
			1264.000	0.0037		
			1283.300	0.0083		
			1396.300	0.0103		
			1410.000	0.0087		
			1413.200	0.0073		
			1493.400	0.0013		
			1511.100	0.0040		
			1548.500	0.0080		
			1552.700	0.0033		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
207 At	85	1.800 h	1557.000	0.0023	0.6600	0.4905
			1642.100	0.0093		
			1676.800	0.0200		
			1690.800	0.0023		
			1712.800	0.0103		
			1716.500	0.0080		
			1731.000	0.0280		
			1772.800	0.0050		
			1781.900	0.0043		
			1786.800	0.0070		
			1805.400	0.0063		
			1876.100	0.0023		
			2016.700	0.0050		
			2029.800	0.0020		
			2053.000	0.0017		
			2075.200	0.0047		
			2343.300	0.0070		
			2393.800	0.0013		
			2558.500	0.0027		
			2566.400	0.0027		
			2712.200	0.0093		
207 Rn	86	1.810E-04 s	234.000	0.2100	0.3999	0.2968
			665.100	0.9800		
207 Rn	86	9.300 m	188.000	0.0025	0.5059	0.3936
			233.800	0.0070		
			242.900	0.0015		
			245.700	0.0015		
			295.500	0.0040		
			308.000	0.0017		
			329.450	0.0300		
			337.600	0.0013		
			344.530	0.4500		
			350.100	0.0055		
			367.600	0.0250		
			377.900	0.0070		
			380.300	0.0026		
			402.680	0.1200		
			417.700	0.0045		
			436.300	0.0030		
			443.500	0.0019		
			446.100	0.0050		
			471.400	0.0020		
			475.600	0.0070		
			477.800	0.0035		
			485.000	0.0024		
			486.900	0.0029		
			511.000	0.2464		
			520.200	0.0014		
			524.200	0.0023		
			535.200	0.0035		
			537.600	0.0028		
			547.000	0.0033		
			553.200	0.0120		
			559.200	0.0021		
			561.100	0.0035		
			566.300	0.0029		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
207 Rn	86	9.300 m	573.400	0.0017	0.5059	0.3936
			580.100	0.0035		
			599.000	0.0024		
			604.000	0.0020		
			610.100	0.0038		
			616.200	0.0022		
			620.700	0.0032		
			628.600	0.0110		
			631.600	0.0290		
			636.000	0.0014		
			638.100	0.0014		
			643.400	0.0120		
			647.200	0.0180		
			655.600	0.0019		
			660.400	0.0090		
			672.000	0.0060		
			674.000	0.0410		
			674.000	0.0800		
			685.800	0.0120		
			687.500	0.0060		
			691.500	0.0012		
			697.500	0.0240		
			700.500	0.0044		
			712.800	0.0060		
			739.800	0.0023		
			747.150	0.1400		
			751.600	0.0045		
			754.200	0.0027		
			768.600	0.0028		
			775.300	0.0200		
			788.100	0.0021		
			792.300	0.0017		
			798.900	0.0022		
			804.300	0.0020		
			806.100	0.0028		
			820.700	0.0023		
			823.300	0.0020		
			847.500	0.0031		
			853.400	0.0230		
			861.400	0.0015		
			865.400	0.0023		
			873.500	0.0024		
			879.900	0.0018		
			884.500	0.0030		
			884.800	0.0017		
			892.700	0.0100		
			908.600	0.0140		
			919.800	0.0029		
			923.200	0.0013		
			939.400	0.0035		
			947.900	0.0030		
			951.800	0.0037		
			973.350	0.0250		
			983.000	0.0024		
			985.800	0.0038		
			990.700	0.0034		
			993.200	0.0050		
			999.200	0.0120		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
207 Rn	86	9.300 m	1083.000	0.0027	0.5059	0.3936
			1121.100	0.0023		
			1129.700	0.0020		
			1190.400	0.0023		
			1224.800	0.0059		
			1254.600	0.0034		
			1507.500	0.0045		
			1522.800	0.0070		
			1539.500	0.0060		
			2576.600	0.0030		
208 Tl	81	3.070 m	211.500	0.0017	1.5249	1.1274
			233.360	0.0031		
			252.610	0.0080		
			277.350	0.0680		
			510.800	0.2160		
			583.140	0.8580		
			722.040	0.0020		
			763.130	0.0164		
			860.370	0.1200		
			927.600	0.0013		
			982.700	0.0020		
			1093.100	0.0037		
			2614.600	0.9979		
209 Tl	81	2.200 m	117.000	0.8100	1.0105	0.7711
			467.000	0.8100		
			1566.000	0.9800		
209 Po	84	102.070 y	260.500	0.0017	0.0015	0.0011
			900.000	0.0025		
209 At	85	5.410 h	90.800	0.0184	1.2055	0.8939
			104.200	0.0240		
			113.100	0.0012		
			191.000	0.0041		
			195.000	0.2260		
			233.600	0.0096		
			239.100	0.1240		
			321.100	0.0063		
			388.800	0.0049		
			545.000	0.9100		
			551.000	0.0491		
			552.500	0.0155		
			554.600	0.0059		
			596.200	0.0066		
			630.300	0.0068		
			666.100	0.0187		
			781.900	0.8350		
			790.200	0.6350		
			815.600	0.0023		
			817.600	0.0016		
			854.400	0.0058		
			863.900	0.0207		
			903.000	0.0365		
			985.200	0.0085		
			999.600	0.0016		
			1043.450	0.0011		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
209 At	85	5.410 h	1074.600	0.0020	1.2055	0.8939
			1096.000	0.0014		
			1103.400	0.0540		
			1141.300	0.0033		
			1147.600	0.0136		
			1148.800	0.0078		
			1170.600	0.0309		
			1175.300	0.0191		
			1183.100	0.0014		
			1192.800	0.0016		
			1213.700	0.0043		
			1217.200	0.0111		
			1262.600	0.0189		
			1289.700	0.0027		
			1333.400	0.0014		
			1356.900	0.0016		
			1446.100	0.0054		
			1456.600	0.0012		
			1490.800	0.0027		
			1533.100	0.0017		
			1537.700	0.0049		
			1575.500	0.0086		
			1581.600	0.0179		
			1622.400	0.0017		
			1687.300	0.0037		
			1767.000	0.0051		
			1786.500	0.0012		
209 Rn	86	28.500 m	182.040	0.0025	0.5196	0.3995
			188.400	0.0012		
			275.900	0.0036		
			279.200	0.0112		
			286.570	0.0031		
			296.600	0.0033		
			302.850	0.0057		
			337.450	0.1470		
			357.380	0.0033		
			380.680	0.0057		
			386.430	0.0209		
			408.320	0.5100		
			461.410	0.0146		
			511.000	0.0794		
			526.800	0.0021		
			577.100	0.0099		
			599.400	0.0059		
			605.400	0.0017		
			672.820	0.0332		
			684.900	0.0118		
			689.260	0.0980		
			695.900	0.0024		
			705.500	0.0027		
			722.500	0.0042		
			730.900	0.0026		
			745.780	0.2310		
			761.590	0.0057		
			794.720	0.0341		
			855.760	0.0490		
			868.430	0.0034		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
209 Rn	86	28.500 m	872.400	0.0070	0.5196	0.3995
			985.900	0.0055		
			1021.500	0.0019		
			1027.550	0.0019		
			1037.930	0.0422		
			1054.530	0.0166		
			1059.450	0.0057		
			1065.550	0.0172		
			1082.000	0.0011		
			1085.000	0.0015		
			1097.550	0.0024		
			1110.200	0.0013		
			1129.000	0.0017		
			1135.200	0.0021		
			1158.800	0.0085		
			1186.660	0.0042		
			1207.300	0.0025		
			1298.200	0.0022		
			1338.000	0.0016		
			1341.400	0.0050		
			1394.420	0.0099		
			1471.800	0.0015		
			1543.050	0.0082		
			1592.100	0.0019		
			1669.500	0.0012		
			1708.950	0.0068		
			1722.500	0.0014		
			1746.100	0.0015		
			1771.200	0.0019		
			1796.500	0.0017		
			1925.700	0.0027		
			1954.300	0.0013		
			2114.050	0.0033		
			2150.000	0.0015		
			2195.500	0.0011		
			2281.700	0.0011		
			2346.000	0.0012		
			2463.700	0.0010		
			2475.500	0.0010		
			2555.700	0.0012		
			2642.900	0.0032		
			2942.000	0.0013		
			3136.000	0.0013		
210 Pb	82	22.315 y	46.503	0.0405	0.0016	0.0011
210 Bi	83	3.002E+06 y	265.700	0.5100	0.1372	0.1252
			304.800	0.2750		
			329.100	0.0060		
			344.000	0.0070		
			369.600	0.0070		
			535.000	0.0025		
			649.800	0.0286		
211 Pb	82	36.100 m	404.840	0.0383	0.0363	0.0281
			426.990	0.0172		
			704.500	0.0048		
			766.340	0.0071		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
211 Pb	82	36.100 m	831.830	0.0381	0.0368	0.0281
			1109.500	0.0015		
211 Bi	83	2.140 m	351.000	0.1276	0.0255	0.0228
211 Po	84	0.516 s	569.650	0.0053	0.0043	0.0032
			897.800	0.0052		
211 Po m	84	25.200 s	569.700	0.0120	0.0089	0.0066
			897.700	0.0100		
211 At	85	7.214 h	687.000	0.0025	0.0010	0.0007
211 Rn	86	14.600 h	68.500	0.0044	0.9995	0.7402
			168.700	0.0680		
			191.800	0.0092		
			250.200	0.0610		
			262.100	0.0023		
			350.500	0.0040		
			370.500	0.0138		
			416.400	0.0354		
			442.200	0.2340		
			592.300	0.0027		
			674.100	0.4600		
			678.400	0.2940		
			684.700	0.0060		
			853.400	0.0470		
			866.000	0.0800		
			934.700	0.0372		
			946.700	0.0510		
			947.400	0.1650		
			992.500	0.0138		
			1012.500	0.0022		
			1126.700	0.2250		
			1181.300	0.0147		
			1318.300	0.0013		
			1362.900	0.3310		
			1538.800	0.0480		
			1805.000	0.0012		
			1992.700	0.0051		
211 Fr	87	3.100 m	221.000	0.0270	0.2503	0.1897
			281.000	0.1020		
			440.000	0.0600		
			540.000	0.3000		
			763.000	0.0150		
			918.000	0.1650		
			983.000	0.0600		
212 Pb	82	10.640 h	115.175	0.0060	0.0637	0.0576
			238.626	0.4460		
			300.090	0.0341		
212 Bi	83	60.550 m	39.857	0.0109	0.0991	0.0725
			288.080	0.0034		
			327.960	0.0014		
			452.830	0.0035		
			727.170	0.1180		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
212 Bi	83	60.550 m	785.420	0.0199	0.0991	0.0725
			893.390	0.0066		
			952.100	0.0031		
			1078.620	0.0097		
			1512.750	0.0057		
			1620.560	0.0275		
			1679.800	0.0013		
			1806.000	0.0021		
213 Bi	83	45.630 m	324.000	0.0016	0.0003	0.0003
213 Bi	83	45.650 m	292.300	0.0049	0.0737	0.0591
			439.700	0.2730		
			806.600	0.0035		
			1101.000	0.0039		
214 Pb	82	26.800 m	53.226	0.0110	0.1294	0.1158
			241.910	0.0746		
			258.790	0.0055		
			274.530	0.0032		
			295.170	0.1920		
			351.900	0.3710		
			462.100	0.0017		
			480.420	0.0034		
			487.080	0.0044		
			533.690	0.0019		
			580.150	0.0036		
			785.910	0.0109		
			839.025	0.0059		
214 Bi	83	19.900 m	273.700	0.0018	0.7460	0.5497
			387.000	0.0036		
			389.100	0.0041		
			405.740	0.0017		
			426.500	0.0011		
			454.770	0.0032		
			469.690	0.0013		
			474.380	0.0012		
			609.318	0.4610		
			665.453	0.0156		
			703.110	0.0047		
			719.860	0.0040		
			752.840	0.0013		
			768.361	0.0488		
			786.100	0.0031		
			806.174	0.0123		
			821.180	0.0015		
			904.250	0.0011		
			934.052	0.0316		
			964.080	0.0038		
			1051.960	0.0032		
			1069.960	0.0029		
			1120.276	0.1500		
			1133.660	0.0025		
			1155.190	0.0169		
			1207.680	0.0046		
			1238.110	0.0592		
			1280.960	0.0147		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
214 Bi	83	19.900 m	1303.760	0.0012	0.7460	0.5497
			1377.650	0.0402		
			1385.310	0.0078		
			1401.500	0.0139		
			1407.980	0.0248		
			1509.190	0.0219		
			1538.500	0.0041		
			1543.320	0.0035		
			1583.220	0.0072		
			1594.730	0.0026		
			1599.310	0.0033		
			1661.280	0.0115		
			1683.990	0.0024		
			1729.600	0.0305		
			1764.510	0.1590		
			1838.360	0.0038		
			1847.440	0.0212		
			1873.160	0.0023		
			1896.300	0.0018		
			2118.540	0.0121		
			2204.120	0.0499		
			2293.360	0.0032		
			2447.710	0.0155		
218 At	85	2.000 s	53.000	0.0661	0.0023	0.0019
218 Rn	86	0.035 s	609.310	0.0012	0.0004	0.0003
219 Rn	86	3.960 s	130.670	0.0013	0.0301	0.0267
			271.230	0.0990		
			401.780	0.0660		
220 Fr	87	27.400 s	45.000	0.0234	0.0041	0.0038
			61.000	0.0043		
			106.000	0.0169		
			124.500	0.0017		
			132.500	0.0019		
			154.000	0.0100		
			161.500	0.0152		
220 Ra	88	0.023 s	465.000	0.0100	0.0027	0.0021
221 Fr	87	4.800 m	99.500	0.0014	0.0148	0.0136
			217.600	0.1250		
			409.500	0.0012		
222 Ra	88	38.000 s	324.220	0.0277	0.0051	0.0047
223 Fr	87	21.800 m	49.880	0.0074	0.0261	0.0225
			50.200	0.3400		
			79.770	0.0920		
			100.300	0.0100		
			134.500	0.0054		
			173.450	0.0014		
			184.700	0.0031		
			205.600	0.0095		
			234.900	0.0340		
			289.500	0.0027		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
223 Fr	87	21.800 m	319.260	0.0057	0.0261	0.0225
			369.400	0.0011		
			775.300	0.0042		
223 Ra	88	11.434 d	122.310	0.0119	0.0458	0.0427
			144.200	0.0326		
			154.190	0.0559		
			158.620	0.0069		
			179.670	0.0015		
			269.410	0.1360		
			288.170	0.0015		
			323.890	0.0390		
			328.500	0.0020		
			338.320	0.0278		
			342.900	0.0020		
			371.840	0.0049		
			444.940	0.0127		
223 Ac	89	2.200 m	73.000	0.0020	0.0011	0.0010
			84.000	0.0017		
			93.000	0.0017		
			99.000	0.0020		
			192.000	0.0025		
			216.000	0.0015		
			477.000	0.0014		
224 Ra	88	3.660 d	241.000	0.0390	0.0051	0.0046
224 Ac	89	2.900 h	83.500	0.0017	0.0646	0.0612
			84.400	0.0100		
			133.000	0.1970		
			141.000	0.0032		
			144.500	0.0015		
			157.000	0.0053		
			217.000	0.4415		
			261.500	0.0018		
224 Th	90	1.040 s	177.000	0.0900	0.0109	0.0104
			235.000	0.0040		
			297.000	0.0030		
			410.000	0.0080		
225 Ra	88	14.800 d	40.000	0.2900	0.0138	0.0070
225 Ac	89	10.000 d	62.850	0.0042	0.0054	0.0055
			73.700	0.0048		
			82.900	0.0015		
			87.300	0.0031		
			94.600	0.0013		
			99.400	0.0060		
			99.700	0.0350		
			108.200	0.0025		
			111.400	0.0032		
			138.200	0.0020		
			144.700	0.0013		
			149.900	0.0073		
			153.700	0.0017		
			157.200	0.0035		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
225 Ac	89	10.000 d	187.700	0.0055	0.0054	0.0055
			195.500	0.0015		
			216.200	0.0034		
			224.500	0.0010		
			253.600	0.0013		
			453.000	0.0011		
226-Ra+da.		1601.096 y	186.000	0.0330	0.8782	0.6683
			241.910	0.0746		
			258.790	0.0055		
			273.700	0.0018		
			274.530	0.0032		
			295.170	0.1920		
			351.900	0.3710		
			387.000	0.0036		
			389.100	0.0041		
			405.740	0.0017		
			426.500	0.0011		
			454.770	0.0032		
			462.100	0.0017		
			469.690	0.0013		
			474.380	0.0012		
			480.420	0.0034		
			487.080	0.0044		
			533.690	0.0019		
			580.150	0.0036		
			609.318	0.4610		
			665.453	0.0156		
			703.110	0.0047		
			719.860	0.0040		
			752.840	0.0013		
			768.100	0.0488		
			785.910	0.0109		
			786.100	0.0031		
			806.174	0.0123		
			821.180	0.0015		
			839.025	0.0059		
			904.250	0.0011		
			934.052	0.0316		
			964.080	0.0038		
			1051.960	0.0032		
			1069.960	0.0029		
			1120.276	0.1500		
			1133.660	0.0026		
			1155.190	0.0169		
			1207.680	0.0046		
			1238.110	0.0592		
			1280.960	0.0147		
			1303.760	0.0012		
			1377.650	0.0402		
			1385.310	0.0078		
			1401.500	0.0139		
			1407.980	0.0248		
			1509.190	0.0219		
			1538.500	0.0041		
			1543.320	0.0035		
			1583.220	0.0072		
			1594.730	0.0026		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
226-Ra+da.		1601.096 y	1599.310	0.0033	0.8782	0.6685
			1661.280	0.0115		
			1683.990	0.0024		
			1729.600	0.0305		
			1764.510	0.1590		
			1838.360	0.0038		
			1847.440	0.0212		
			1873.160	0.0023		
			1896.300	0.0018		
			2118.540	0.0121		
			2204.120	0.0499		
			2293.360	0.0033		
			2447.710	0.0155		
226 Ra	88	1601.096 y	185.990	0.0328	0.0031	0.0030
226 Ac	89	1.208 d	67.600	0.0011	0.0593	0.0552
			72.230	0.0056		
			158.050	0.1730		
			185.600	0.0470		
			230.000	0.2700		
			253.500	0.0560		
226 Th	90	30.900 m	111.120	0.0329	0.0033	0.0033
			131.020	0.0028		
			190.300	0.0011		
			206.230	0.0019		
			242.120	0.0087		
227 Ra	88	42.200 m	46.370	0.0019	0.0772	0.0663
			209.600	0.0010		
			218.190	0.0020		
			219.900	0.0020		
			228.000	0.0042		
			232.200	0.0030		
			243.100	0.0054		
			255.800	0.0020		
			258.400	0.0200		
			273.160	0.0096		
			277.390	0.0290		
			283.670	0.0340		
			300.080	0.0500		
			302.670	0.0480		
			327.200	0.0030		
			330.070	0.0300		
			341.100	0.0022		
			354.590	0.0075		
			379.330	0.0047		
			407.970	0.0240		
			435.380	0.0025		
			468.500	0.0027		
			471.300	0.0027		
			486.980	0.0250		
			490.900	0.0015		
			501.400	0.0100		
			516.200	0.0150		
			535.600	0.0066		
			543.100	0.0027		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
227 Ra	88	42.200 m	611.400	0.0130	0.0772	0.0663
			639.400	0.0024		
			652.200	0.0024		
			671.200	0.0016		
			760.300	0.0013		
			789.800	0.0016		
			836.400	0.0010		
			863.500	0.0016		
227 Th	90	18.718 d	43.800	0.0023	0.0531	0.0483
			49.880	0.0020		
			50.200	0.0850		
			62.500	0.0024		
			79.770	0.0210		
			94.000	0.0140		
			113.200	0.0056		
			113.200	0.0015		
			117.200	0.0017		
			141.300	0.0013		
			204.300	0.0023		
			205.000	0.0015		
			206.100	0.0023		
			210.650	0.0113		
			234.900	0.0045		
			236.000	0.1120		
			250.200	0.0037		
			250.400	0.0013		
			252.550	0.0011		
			254.700	0.0080		
			256.250	0.0680		
			262.800	0.0010		
			273.000	0.0049		
			281.400	0.0016		
			286.150	0.0160		
			296.600	0.0043		
			299.900	0.0200		
			300.300	0.0020		
			304.440	0.0105		
			312.660	0.0048		
			314.860	0.0046		
			329.820	0.0280		
			334.400	0.0100		
			342.460	0.0035		
			350.500	0.0011		
227 Pa	91	38.300 m	65.000	0.0527	0.0029	0.0030
			67.000	0.0100		
			110.000	0.0170		
228 Ac	89	6.130 h	57.760	0.0052	0.4953	0.3724
			99.450	0.0140		
			129.100	0.0290		
			145.900	0.0022		
			154.200	0.0100		
			184.600	0.0010		
			191.500	0.0012		
			199.500	0.0035		
			204.100	0.0017		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
228 Ac	89	6.130 h	209.200	0.0460	0.4953	0.3724
			270.300	0.038		
			279.000	0.0023		
			321.700	0.0025		
			328.000	0.0340		
			332.400	0.0047		
			338.400	0.1200		
			340.900	0.0042		
			409.400	0.0220		
			440.300	0.0014		
			463.000	0.0460		
			478.200	0.0024		
			503.700	0.0021		
			509.600	0.0049		
			523.000	0.0012		
			546.300	0.0022		
			562.300	0.0099		
			570.700	0.0019		
			572.100	0.0015		
			583.200	0.0015		
			651.400	0.0010		
			674.600	0.0010		
			701.500	0.0020		
			707.300	0.0016		
			727.000	0.0080		
			755.200	0.0110		
			772.100	0.0160		
			782.000	0.0055		
			794.800	0.0480		
			830.400	0.0062		
			835.600	0.0180		
			840.200	0.0099		
			904.200	0.0087		
			911.070	0.2900		
			944.100	0.0011		
			948.000	0.0012		
			958.500	0.0032		
			964.600	0.0550		
			968.900	0.1700		
			988.100	0.0019		
			1033.100	0.0023		
			1065.100	0.0015		
			1095.700	0.0013		
			1110.600	0.0035		
			1153.600	0.0016		
			1247.100	0.0057		
			1287.500	0.0012		
			1459.200	0.0104		
			1495.800	0.0105		
			1501.500	0.0058		
			1556.900	0.0020		
			1580.200	0.0071		
			1587.900	0.0370		
			1624.700	0.0032		
			1630.400	0.0190		
			1638.000	0.0054		
			1666.400	0.0021		
			1685.900	0.0010		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
228 Ac	89	6.130 h	1887.400	0.0011	0.4953	0.3724
228 Th	90	1.914 y	84.400	0.0120	0.0008	0.0009
			131.620	0.0011		
			215.940	0.0027		
228 Pa	91	22.000 h	57.700	0.0052	0.5459	0.4125
			95.000	0.0480		
			99.700	0.0022		
			129.220	0.0285		
			130.000	0.0054		
			132.000	0.0046		
			138.300	0.0040		
			146.100	0.0032		
			150.000	0.0068		
			153.900	0.0036		
			170.000	0.0022		
			191.200	0.0027		
			199.700	0.0029		
			200.000	0.0028		
			204.400	0.0048		
			209.280	0.0167		
			210.000	0.0036		
			216.150	0.0087		
			219.800	0.0018		
			220.000	0.0020		
			223.610	0.0092		
			240.000	0.0100		
			240.200	0.0010		
			255.000	0.0030		
			270.230	0.0210		
			278.000	0.0012		
			280.000	0.0098		
			281.870	0.0123		
			310.000	0.0200		
			327.640	0.0186		
			327.640	0.0200		
			332.360	0.0157		
			338.320	0.0510		
			341.100	0.0154		
			345.000	0.0042		
			409.510	0.0600		
			449.300	0.0030		
			461.000	0.0084		
			463.000	0.1320		
			481.300	0.0012		
			498.000	0.0060		
			511.000	0.0030		
			525.000	0.0018		
			547.500	0.0012		
			556.100	0.0018		
			563.200	0.0066		
			571.100	0.0057		
			573.000	0.0044		
			581.400	0.0102		
			619.600	0.0030		
			650.500	0.0025		
			663.300	0.0036		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
228 Pa	91	22.000 h	667.900	0.0039	0.5459	0.4125
			677.000	0.0058		
			707.100	0.0030		
			718.100	0.0024		
			726.200	0.0048		
			745.000	0.0012		
			750.500	0.0021		
			755.180	0.0126		
			772.170	0.0119		
			776.500	0.0042		
			782.000	0.0060		
			790.800	0.0027		
			794.700	0.0200		
			796.000	0.0012		
			818.000	0.0060		
			823.500	0.0024		
			830.500	0.0195		
			835.500	0.0272		
			840.000	0.0102		
			870.100	0.0106		
			884.200	0.0034		
			888.600	0.0078		
			894.300	0.0260		
			904.500	0.0288		
			911.230	0.1600		
			921.700	0.0060		
			923.800	0.0036		
			940.000	0.0060		
			945.600	0.0180		
			957.800	0.0060		
			964.600	0.1010		
			969.110	0.1320		
			975.000	0.0156		
			987.800	0.0024		
			1018.600	0.0021		
			1033.200	0.0048		
			1039.900	0.0017		
			1054.400	0.0014		
			1070.200	0.0011		
			1110.400	0.0043		
			1246.400	0.0090		
			1288.000	0.0012		
			1298.000	0.0011		
			1431.700	0.0014		
			1453.800	0.0012		
			1459.300	0.0072		
			1495.900	0.0017		
			1528.800	0.0017		
			1557.200	0.0028		
			1572.900	0.0017		
			1580.000	0.0038		
			1588.000	0.0243		
			1618.700	0.0014		
			1621.200	0.0026		
			1630.300	0.0010		
			1666.300	0.0019		
			1685.800	0.0014		
			1705.700	0.0022		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
228 Pa	91	22.000 h	1738.400	0.0064	0.5459	0.4125
			1757.800	0.0054		
			1835.100	0.0064		
			1842.200	0.0016		
			1880.000	0.0014		
			1887.000	0.0156		
228 U	92	9.100 m	152.000	0.0019	0.0009	0.0009
			187.000	0.0028		
			246.000	0.0038		
229 Th	90	7345.027 y	31.300	0.0400	0.0193	0.0168
			42.760	0.0016		
			56.600	0.0033		
			68.180	0.0010		
			68.900	0.0011		
			75.200	0.0052		
			86.300	0.0038		
			86.440	0.0300		
			107.170	0.0084		
			124.500	0.0122		
			124.700	0.0061		
			131.970	0.0033		
			137.030	0.0163		
			142.950	0.0043		
			148.300	0.0139		
			154.400	0.0066		
			156.480	0.0112		
			172.900	0.0022		
			179.800	0.0050		
			184.000	0.0023		
			193.630	0.0459		
			210.970	0.0326		
			218.100	0.0014		
229 Pa	91	1.400 d	30.000	0.0025	0.0012	0.0010
			40.000	0.0025		
			64.700	0.0023		
			67.700	0.0025		
			75.100	0.0025		
			111.600	0.0015		
			115.500	0.0023		
			120.800	0.0025		
			135.200	0.0010		
			140.600	0.0025		
			179.900	0.0010		
230 Th	90	77052.740 y	67.730	0.0038	0.0001	0.0001
230 Pa	91	17.400 d	53.200	0.0023	0.3209	0.2374
			120.900	0.0034		
			314.800	0.0011		
			316.800	0.0016		
			380.150	0.0029		
			397.800	0.0182		
			399.950	0.0061		
			440.800	0.0011		
			443.750	0.0530		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
230 Pa	91	17.400 d	454.950	0.0610	0.3209	0.2374
			463.600	0.0080		
			508.000	0.0021		
			508.200	0.0350		
			518.500	0.0192		
			556.000	0.0019		
			571.100	0.0105		
			581.800	0.0013		
			619.690	0.0016		
			728.230	0.0184		
			781.350	0.0144		
			898.650	0.0570		
			918.500	0.0800		
			951.950	0.2830		
			953.000	0.0016		
			956.300	0.0150		
			959.300	0.0048		
			1009.600	0.0105		
			1026.050	0.0142		
			1074.680	0.0073		
230 U	92	20.800 d	72.200	0.0060	0.0005	0.0005
			154.230	0.0013		
			230.370	0.0012		
231 Th	90	1.063 d	58.570	0.0048	0.0039	0.0042
			72.780	0.0025		
			81.240	0.0089		
			82.110	0.0040		
			84.210	0.0650		
			89.950	0.0094		
			99.280	0.0012		
			102.270	0.0041		
			163.120	0.0016		
231 Pa	91	32782.438 y	38.200	0.0015	0.0139	0.0130
			46.370	0.0021		
			255.800	0.0010		
			260.220	0.0017		
			283.670	0.0160		
			300.080	0.0230		
			302.670	0.0230		
			330.000	0.0130		
			340.810	0.0016		
			357.160	0.0017		
231 U	92	4.200 d	58.540	0.0044	0.0040	0.0041
			84.180	0.0700		
			220.000	0.0080		
			236.000	0.0020		
231 Np	93	48.800 m	263.800	0.0284	0.0589	0.0487
			348.400	0.0363		
			370.900	0.0980		
			376.300	0.0064		
			416.300	0.0028		
			420.700	0.0105		
			436.900	0.0028		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	Γ Rem/h/Ci
231 Np	93	48.800 m	481.600	0.0061	0.0589	0.0487
			484.700	0.0160		
			715.500	0.0024		
			737.800	0.0123		
			786.600	0.0019		
			837.300	0.0040		
			851.600	0.0070		
			1108.100	0.0054		
232 Th	90	1.406E+10 y	59.000	0.0015	0.0001	0.0000
232 Pa	91	1.310 d	47.650	0.0021	0.5121	0.3819
			80.270	0.0015		
			105.470	0.0165		
			108.960	0.0280		
			139.600	0.0058		
			150.100	0.1080		
			183.900	0.0130		
			387.900	0.0700		
			421.900	0.0252		
			453.600	0.0862		
			472.400	0.0416		
			515.600	0.0552		
			563.200	0.0368		
			581.500	0.0600		
			710.100	0.0022		
			754.700	0.0051		
			819.200	0.0745		
			864.000	0.0194		
			867.000	0.0581		
			894.300	0.1980		
			969.300	0.4160		
			1003.300	0.0016		
			1125.000	0.0021		
232 U	92	72.049 y	57.700	0.0020	0.0001	0.0001
232 Np	93	14.700 m	47.650	0.0016	0.6077	0.4692
			108.960	0.0153		
			143.400	0.0042		
			165.000	0.0031		
			223.600	0.0220		
			282.000	0.1980		
			327.300	0.5200		
			377.000	0.0125		
			710.700	0.0057		
			755.000	0.0420		
			814.800	0.0410		
			819.500	0.3300		
			864.300	0.2030		
			867.200	0.2400		
			895.100	0.0083		
			924.400	0.0094		
			941.600	0.0160		
			970.900	0.0031		
			1016.800	0.0057		
			1037.400	0.0330		
			1085.400	0.0099		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
232 Np	93	14.700 m	1126.000	0.0146	0.6077	0.4692
			1133.100	0.0088		
			1146.300	0.0036		
			1193.900	0.0036		
			1936.000	0.0042		
233 Th	90	22.300 m	86.500	0.0270	0.0128	0.0105
			88.000	0.0030		
			94.680	0.0080		
			162.500	0.0017		
			162.500	0.0015		
			169.100	0.0034		
			170.700	0.0013		
			190.540	0.0013		
			194.900	0.0016		
			359.900	0.0012		
			441.000	0.0023		
			447.700	0.0015		
			459.200	0.0140		
			490.800	0.0017		
			499.000	0.0020		
			595.200	0.0016		
			669.800	0.0068		
			764.400	0.0012		
			890.100	0.0014		
233 Pa	91	27.000 d	75.280	0.0117	0.0911	0.0851
			86.590	0.0176		
			103.860	0.0069		
			271.480	0.0028		
			300.120	0.0620		
			311.980	0.3600		
			340.500	0.0420		
			375.450	0.0058		
			398.620	0.0119		
			415.760	0.0151		
233 Np	93	36.200 m	234.300	0.0015	0.0038	0.0033
			280.500	0.0013		
			299.100	0.0050		
			312.100	0.0070		
			506.500	0.0015		
			546.900	0.0028		
233 Pu	94	20.900 m	150.400	0.1520	1.8456	1.4081
			180.800	0.1200		
			191.000	0.1300		
			207.400	0.2380		
			221.700	0.1180		
			235.400	0.9988		
			247.400	0.0720		
			457.400	0.1020		
			473.200	0.0720		
			478.300	0.1380		
			500.300	0.3900		
			504.000	0.2070		
			512.400	0.1300		
			524.400	0.1300		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
233 Pu	94	20.900 m	534.800	0.9000	1.8456	1.4081
			558.800	0.2690		
			583.300	0.0860		
			688.100	0.3300		
			726.200	0.0900		
			830.900	0.1110		
			978.100	0.1340		
			991.700	0.2300		
			1000.500	0.1800		
			1004.000	0.3100		
			1012.300	0.2800		
			1028.400	0.0660		
			1035.400	0.0570		
234 Th	90	24.100 d	63.290	0.0380	0.0036	0.0038
			92.380	0.0272		
			92.800	0.0269		
			112.810	0.0024		
234 Pa m	91	1.170 m	43.500	0.0065	0.0044	0.0032
			766.600	0.0021		
			1001.030	0.0059		
234 Pa	91	6.700 h	43.400	0.0030	1.0182	0.7614
			63.000	0.0320		
			69.900	0.0023		
			79.690	0.0027		
			99.700	0.0480		
			103.410	0.0012		
			125.400	0.0100		
			131.200	0.2000		
			134.370	0.0021		
			137.700	0.0015		
			140.300	0.0090		
			144.000	0.0035		
			150.200	0.0020		
			152.700	0.0670		
			159.100	0.0070		
			170.700	0.0050		
			174.600	0.0020		
			186.000	0.0200		
			193.600	0.0060		
			199.700	0.0300		
			200.600	0.0110		
			203.000	0.0120		
			219.800	0.0020		
			226.400	0.0590		
			227.200	0.0550		
			245.200	0.0090		
			248.900	0.0280		
			267.100	0.0017		
			272.000	0.0030		
			272.100	0.0100		
			286.100	0.0014		
			289.600	0.0011		
			293.700	0.0390		
			309.600	0.0010		
			312.500	0.0030		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
234 Pa	91	6.700 h	316.300	0.0012	1.0182	0.7614
			320.700	0.0012		
			328.000	0.0030		
			330.600	0.0060		
			351.900	0.0060		
			369.800	0.0290		
			372.400	0.0130		
			409.800	0.0040		
			416.300	0.0010		
			426.800	0.0060		
			446.500	0.0012		
			458.800	0.0150		
			461.800	0.0016		
			467.500	0.0040		
			472.100	0.0024		
			473.500	0.0018		
			478.700	0.0030		
			480.400	0.0040		
			482.500	0.0030		
			498.900	0.0010		
			506.800	0.0160		
			513.700	0.0130		
			520.200	0.0060		
			521.000	0.0090		
			528.000	0.0060		
			533.200	0.0020		
			537.100	0.0016		
			557.000	0.0026		
			565.900	0.0140		
			568.700	0.0300		
			569.500	0.1100		
			574.000	0.0200		
			585.800	0.0015		
			596.600	0.0050		
			602.800	0.0090		
			611.500	0.0080		
			616.200	0.0020		
			623.600	0.0080		
			627.500	0.0080		
			630.600	0.0040		
			634.500	0.0030		
			639.700	0.0020		
			643.200	0.0020		
			646.000	0.0030		
			653.700	0.0090		
			655.000	0.0060		
			658.000	0.0090		
			660.600	0.0030		
			664.800	0.0130		
			666.700	0.0160		
			669.900	0.0140		
			683.300	0.0024		
			687.000	0.0028		
			692.700	0.0150		
			699.000	0.0460		
			706.100	0.0310		
			711.200	0.0020		
			713.800	0.0016		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
234 Pa	91	6.700 h	733.000	0.0900	1.0182	0.7614
			738.000	0.0100		
			742.810	0.0240		
			746.500	0.0013		
			755.600	0.0140		
			760.000	0.0016		
			766.360	0.0030		
			768.700	0.0056		
			777.900	0.0020		
			780.700	0.0110		
			783.100	0.0050		
			786.270	0.0140		
			793.600	0.0150		
			796.300	0.0380		
			804.300	0.0040		
			805.800	0.0330		
			812.500	0.0050		
			819.600	0.0260		
			826.300	0.0400		
			831.600	0.0550		
			841.900	0.0014		
			844.400	0.0050		
			851.700	0.0012		
			872.900	0.0012		
			876.400	0.0400		
			880.500	0.0400		
			880.510	0.0900		
			883.240	0.1200		
			899.000	0.0410		
			904.800	0.0050		
			920.000	0.0040		
			925.000	0.0290		
			926.000	0.1100		
			927.100	0.0900		
			946.000	0.1200		
			949.000	0.0800		
			960.000	0.0010		
			966.000	0.0060		
			978.800	0.0140		
			980.500	0.0200		
			980.500	0.0300		
			984.000	0.0190		
			1022.600	0.0060		
			1028.300	0.0080		
			1044.900	0.0050		
			1074.600	0.0025		
			1083.200	0.0075		
			1108.500	0.0030		
			1122.300	0.0050		
			1126.000	0.0080		
			1153.100	0.0030		
			1171.300	0.0024		
			1208.000	0.0030		
			1217.500	0.0037		
			1229.000	0.0030		
			1240.500	0.0050		
			1251.000	0.0030		
			1277.400	0.0020		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
234 Pa	91	6.700 h	1292.700	0.0060	1.0182	0.7614
			1353.300	0.0170		
			1358.500	0.0012		
			1394.100	0.0300		
			1399.700	0.0023		
			1427.500	0.0020		
			1446.000	0.0040		
			1452.700	0.0100		
			1460.000	0.0030		
			1493.700	0.0020		
			1516.000	0.0040		
			1549.400	0.0010		
			1579.700	0.0017		
			1585.400	0.0025		
			1593.800	0.0060		
			1627.900	0.0015		
			1638.000	0.0040		
			1656.000	0.0015		
			1668.500	0.0120		
			1686.200	0.0050		
			1694.600	0.0120		
			1699.800	0.0015		
			1737.600	0.0010		
			1741.700	0.0010		
			1756.000	0.0025		
			1772.300	0.0010		
			1797.300	0.0030		
			1890.100	0.0019		
			1897.100	0.0015		
			1905.000	0.0028		
			1926.000	0.0050		
234 U	92	244667.466 y	53.200	0.0012	0.0000	0.0000
234 Np	93	4.400 d	247.500	0.0011	0.5187	0.3826
			258.300	0.0011		
			388.300	0.0019		
			451.000	0.0132		
			517.200	0.0038		
			556.000	0.0047		
			706.500	0.0018		
			720.500	0.0017		
			743.100	0.0510		
			750.700	0.0047		
			766.600	0.0056		
			786.400	0.0290		
			793.500	0.0019		
			807.000	0.0024		
			807.000	0.0013		
			851.600	0.0023		
			945.700	0.0056		
			1001.600	0.0150		
			1194.100	0.0550		
			1237.300	0.0230		
			1392.200	0.0210		
			1435.700	0.0620		
			1527.500	0.1170		
			1558.700	0.1880		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
234 Np	93	4.400 d	1570.700	0.0550	0.5187	0.3826
			1602.200	0.0960		
235 Pa	91	24.100 m	54.000	0.0260	0.0721	0.0700
			64.350	0.0065		
			72.700	0.0011		
			109.140	0.0150		
			120.000	0.0090		
			140.770	0.0022		
			143.760	0.1050		
			163.350	0.0470		
			182.700	0.0040		
			185.715	0.5400		
			194.940	0.0059		
			202.120	0.0100		
			205.311	0.0470		
			221.380	0.0010		
235 Pu	94	25.300 m	34.200	0.0023	0.0051	0.0037
			49.100	0.0240		
			756.400	0.0048		
			910.100	0.0016		
			940.700	0.0011		
			944.700	0.0011		
236 Pa	91	9.100 m	243.300	0.0015	0.2667	0.1965
			279.200	0.0042		
			366.500	0.0045		
			422.900	0.0051		
			537.800	0.0030		
			594.000	0.0015		
			642.000	0.3000		
			687.200	0.0800		
			874.000	0.0030		
			921.200	0.0025		
			942.600	0.0060		
			966.600	0.0063		
			1064.900	0.0024		
			1559.800	0.0190		
			1617.000	0.0090		
			1662.300	0.0051		
			1762.600	0.0540		
			1808.000	0.0200		
			2041.200	0.0160		
			2086.600	0.0080		
236 U	92	1.250E-07 s	196.000	0.0580	0.4595	0.3515
			204.000	0.1030		
			243.000	0.0810		
			279.000	0.0630		
			300.000	0.0580		
			308.000	0.1710		
			642.000	0.4500		
			687.000	0.1030		
			903.000	0.0810		
			920.000	0.0270		
			942.000	0.1620		
			966.000	0.0720		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
236 Np m	93	22.500 h	642.400	0.0099	0.0047	0.0034
			687.700	0.0026		
236 Np	93	115078.767 y	45.000	0.0026	0.0255	0.0259
			100.000	0.0052		
			104.000	0.0746		
			160.200	0.2760		
237 Pa	91	8.700 m	179.100	0.0017	0.3399	0.2502
			310.100	0.0173		
			498.700	0.0240		
			529.400	0.1480		
			540.700	0.0930		
			543.600	0.0024		
			554.900	0.0153		
			701.000	0.0014		
			722.600	0.0082		
			734.000	0.0065		
			847.100	0.0051		
			853.700	0.3400		
			865.000	0.1550		
			1333.200	0.0017		
			1344.800	0.0010		
			1395.900	0.0017		
			1407.500	0.0010		
237 U	92	6.750 d	33.195	0.0011	0.0406	0.0380
			38.540	0.0037		
			51.010	0.0020		
			59.543	0.3300		
			64.830	0.0116		
			164.610	0.0183		
			208.005	0.2170		
			267.540	0.0071		
			332.360	0.0120		
			370.940	0.0011		
237 Np	93	2.141E+06 y	46.530	0.0014	0.0064	0.0069
			57.150	0.0042		
			86.503	0.1260		
			88.040	0.0016		
			94.660	0.0083		
			117.680	0.0017		
			143.208	0.0042		
			151.370	0.0025		
			195.096	0.0021		
			212.415	0.0016		
237 Pu	94	45.300 d	59.500	0.0325	0.0011	0.0010
237 Am	95	1.217 h	79.050	0.0020	0.1483	0.1286
			124.720	0.0028		
			127.500	0.0011		
			145.552	0.0048		
			179.940	0.0024		
			183.700	0.0019		
			203.030	0.0042		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
237 Am	95	1.217 h	206.700	0.0033	0.1483	0.1286
			214.900	0.0024		
			224.860	0.0024		
			229.100	0.0015		
			248.700	0.0059		
			252.200	0.0027		
			252.200	0.0015		
			273.300	0.0076		
			280.230	0.4700		
			321.000	0.0140		
			390.700	0.0055		
			407.800	0.0063		
			425.800	0.0194		
			435.200	0.0025		
			438.400	0.0830		
			473.500	0.0430		
			501.200	0.0028		
			504.800	0.0019		
			548.500	0.0026		
			655.300	0.0130		
			696.200	0.0020		
			720.400	0.0024		
			743.500	0.0027		
			792.000	0.0016		
			861.200	0.0037		
			908.800	0.0260		
			1000.600	0.0019		
238 U	92	4.471E+09 y	49.550	0.2300	0.0085	0.0065
238 Np	93	2.117 d	44.080	0.0010	0.2970	0.2166
			101.880	0.0021		
			561.150	0.0010		
			882.630	0.0076		
			918.690	0.0051		
			923.980	0.0248		
			936.610	0.0033		
			941.380	0.0045		
			962.770	0.0061		
			984.450	0.2380		
			1025.870	0.0820		
			1028.540	0.1730		
238 Am	95	1.633 h	301.500	0.0050	0.4293	0.3152
			357.700	0.0210		
			515.400	0.0039		
			561.000	0.1090		
			565.800	0.0015		
			574.000	0.0011		
			597.000	0.0015		
			605.100	0.0760		
			617.400	0.0073		
			658.400	0.0018		
			679.500	0.0025		
			821.500	0.0031		
			884.300	0.0013		
			908.800	0.0022		
			918.700	0.2300		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
238 Am	95	1.633 h	941.400	0.0220	0.4293	0.3152
			962.800	0.2800		
			984.000	0.0012		
			1016.200	0.0028		
			1028.500	0.0012		
			1097.300	0.0031		
			1118.200	0.0018		
			1184.500	0.0053		
			1220.000	0.0014		
			1237.000	0.0025		
			1266.200	0.0168		
			1293.200	0.0031		
			1403.200	0.0067		
			1447.300	0.0042		
			1458.500	0.0012		
			1515.900	0.0012		
			1577.300	0.0290		
			1592.500	0.0048		
			1636.600	0.0126		
			1682.200	0.0048		
			1726.400	0.0028		
239 U	92	23.540 m	31.000	0.1600	0.0349	0.0249
			43.000	0.0200		
			43.534	0.0440		
			74.670	0.5000		
			117.660	0.0015		
			662.240	0.0018		
			748.080	0.0011		
			819.220	0.0015		
			844.100	0.0017		
239 Np	93	2.355 d	49.410	0.0010	0.0580	0.0557
			57.260	0.0015		
			61.480	0.0096		
			106.130	0.2270		
			181.710	0.0011		
			209.750	0.0324		
			226.420	0.0034		
			228.190	0.1070		
			254.410	0.0010		
			277.600	0.1410		
			285.410	0.0078		
			315.880	0.0159		
			334.300	0.0203		
239 Am	95	11.900 h	49.412	0.0011	0.0473	0.0439
			57.273	0.0015		
			67.841	0.0013		
			181.715	0.0108		
			209.800	0.0350		
			226.383	0.0330		
			228.184	0.1130		
			277.604	0.1500		
			285.500	0.0080		
240 U	92	14.100 h	44.100	0.0169	0.0007	0.0004
240 Np m	93	7.400 m	66.500	0.0027	0.1772	0.1323

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
240 Np m	93	7.400 m	98.860	0.0017	0.1772	0.1323
			189.500	0.0025		
			251.460	0.0096		
			263.350	0.0117		
			303.980	0.0112		
			507.200	0.0079		
			554.600	0.2240		
			597.400	0.1250		
			606.100	0.0074		
			758.620	0.0119		
			789.590	0.0021		
			813.430	0.0021		
			817.880	0.0124		
			841.110	0.0017		
			857.460	0.0047		
			900.460	0.0013		
			910.090	0.0017		
			915.980	0.0104		
			928.590	0.0017		
			938.040	0.0129		
			942.370	0.0011		
			961.640	0.0014		
			1445.300	0.0036		
			1488.200	0.0021		
			1496.900	0.0131		
			1539.640	0.0079		
			1633.260	0.0014		
240 Np	93	65.000 m	134.600	0.0040	0.6605	0.4968
			147.200	0.0150		
			152.200	0.0900		
			175.000	0.0650		
			182.600	0.0100		
			192.700	0.0730		
			270.800	0.0900		
			295.000	0.0070		
			307.000	0.0150		
			448.200	0.1800		
			462.200	0.0150		
			467.400	0.0220		
			507.200	0.0200		
			566.400	0.2900		
			601.000	0.2200		
			606.100	0.0170		
			847.000	0.0500		
			867.400	0.0900		
			884.900	0.0400		
			890.600	0.0120		
			896.500	0.1400		
			915.200	0.0150		
			958.700	0.0250		
			973.900	0.2300		
			988.000	0.0500		
			1074.400	0.0100		
			1131.800	0.0070		
			1163.000	0.0070		
			1167.600	0.0500		
			1179.000	0.0070		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
240 Am	95	2.117 d	98.900	0.0150	0.5187	0.3782
			888.800	0.2510		
			987.760	0.7300		
241 Am	95	432.496 y	33.195	0.0012	0.0121	0.0115
			59.537	0.3590		
241 Cm	96	32.800 d	32.639	0.0021	0.2276	0.1797
			132.413	0.0390		
			164.800	0.0044		
			165.049	0.0297		
			180.277	0.0048		
			205.879	0.0267		
			265.922	0.0040		
			417.240	0.0065		
			430.634	0.0410		
			447.350	0.0012		
			463.273	0.0123		
			471.805	0.7100		
			504.450	0.0059		
			636.880	0.0153		
			653.200	0.0015		
			670.200	0.0057		
242 Am	95	152.104 y	49.300	0.0020	0.0001	0.0001
243 Pu	94	4.956 h	34.000	0.0300	0.0124	0.0117
			41.800	0.0076		
			67.000	0.0023		
			84.000	0.2300		
			109.300	0.0016		
			356.400	0.0013		
			381.700	0.0055		
243 Am	95	7385.055 y	43.530	0.0550	0.0257	0.0266
			74.670	0.6600		
			86.790	0.0034		
			117.600	0.0055		
			142.180	0.0013		
243 Cm	96	28.520 y	44.663	0.0012	0.0398	0.0370
			57.273	0.0014		
			67.800	0.0014		
			106.130	0.0026		
			209.760	0.0329		
			228.190	0.1060		
			254.410	0.0011		
			277.630	0.1400		
			285.420	0.0073		
243 Bk	97	4.500 h	755.000	0.1000	0.0986	0.0717
			840.000	0.0300		
			946.000	0.0800		
244 Am m	95	26.000 m	42.900	0.2000	0.0086	0.0051
244 Am	95	10.100 h	99.400	0.0483	0.4362	0.3220

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
244 Am	95	10.100 h	154.000	0.1800	0.4362	0.3220
			206.000	0.0026		
			540.000	0.0040		
			746.000	0.6650		
			900.000	0.2750		
245 Pu	94	10.500 h	280.290	0.0132	0.2015	0.1611
			308.110	0.0500		
			327.310	0.2600		
			341.000	0.0010		
			348.730	0.0099		
			376.580	0.0330		
			387.880	0.0030		
			395.870	0.0010		
			411.740	0.0050		
			428.510	0.0054		
			445.340	0.0031		
			491.500	0.0280		
			514.600	0.0017		
			525.080	0.0028		
			560.030	0.0560		
			591.600	0.0017		
			598.800	0.0012		
			624.400	0.0023		
			630.040	0.0280		
			657.200	0.0014		
			660.200	0.0087		
			669.280	0.0035		
			707.980	0.0028		
			730.400	0.0019		
			737.960	0.0023		
			740.200	0.0014		
			743.700	0.0016		
			762.730	0.0073		
			766.590	0.0037		
			776.660	0.0021		
			786.540	0.0038		
			796.370	0.0026		
			799.870	0.0162		
			817.040	0.0087		
			833.140	0.0054		
			840.560	0.0132		
			859.530	0.0052		
			868.800	0.0012		
			874.160	0.0014		
			887.140	0.0073		
			910.460	0.0143		
			938.400	0.0104		
			941.000	0.0026		
			957.590	0.0101		
			975.000	0.0026		
			977.200	0.0040		
			987.600	0.0136		
			996.000	0.0021		
			1005.100	0.0028		
			1007.310	0.0042		
			1013.200	0.0010		
			1018.330	0.0106		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
245 Pu	94	10.500 h	1023.320	0.0056	0.2015	0.1611
245 Am	95	2.050 h	240.800	0.0034	0.0092	0.0082
			252.700	0.0610		
			295.600	0.0022		
245 Cm	96	8505.822 y	133.000	0.0490	0.0074	0.0075
			174.000	0.0500		
245 Bk	97	4.940 d	42.800	0.0028	0.0484	0.0428
			54.800	0.0037		
			103.100	0.0042		
			198.000	0.0016		
			252.850	0.2900		
			365.800	0.0036		
			380.800	0.0240		
			385.000	0.0057		
			408.700	0.0019		
246 Pu	94	10.850 d	43.810	0.3000	0.0578	0.0497
			66.600	0.0031		
			75.640	0.0022		
			179.940	0.1200		
			216.550	0.0013		
			223.750	0.2800		
			255.540	0.0028		
246 Am m	95	25.000 m	99.200	0.0015	0.5344	0.3910
			170.960	0.0012		
			237.190	0.0013		
			238.610	0.0014		
			244.020	0.0063		
			246.090	0.0090		
			261.670	0.0014		
			270.050	0.0094		
			287.760	0.0012		
			401.700	0.0024		
			493.500	0.0011		
			602.700	0.0015		
			649.550	0.0034		
			684.340	0.0055		
			698.260	0.0011		
			717.220	0.0024		
			724.830	0.0022		
			734.460	0.0120		
			745.170	0.0023		
			752.050	0.0082		
			759.600	0.0062		
			781.240	0.0017		
			798.830	0.2560		
			833.620	0.0187		
			986.060	0.0099		
			1036.030	0.1330		
			1062.070	0.1770		
			1078.900	0.2890		
			1081.550	0.0028		
			1085.130	0.0159		
			1122.860	0.0012		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
246 Am m	95	25.000 m	1124.420	0.0024	0.5344	0.3910
			1206.960	0.0017		
			1249.770	0.0016		
			1274.720	0.0029		
			1348.890	0.0016		
			1479.600	0.0026		
			1528.600	0.0010		
			1529.700	0.0017		
			1551.090	0.0041		
			1561.440	0.0013		
			1590.890	0.0058		
			1604.310	0.0012		
			1618.990	0.0015		
			1638.130	0.0018		
			1661.830	0.0026		
			1738.190	0.0013		
246 Am	95	39.000 m	99.200	0.0480	0.3691	0.2840
			127.400	0.0320		
			153.500	0.2500		
			205.000	0.3600		
			629.000	0.0260		
			679.000	0.5300		
			686.000	0.0212		
			756.000	0.1320		
			781.000	0.0400		
			839.000	0.0212		
246 Bk	97	1.830 d	734.500	0.0320	0.4803	0.3495
			800.000	0.7000		
			834.500	0.0560		
			986.000	0.0035		
			1037.000	0.0200		
			1063.000	0.0360		
			1079.000	0.0350		
			1082.000	0.0630		
			1085.000	0.0056		
			1124.000	0.0520		
247 Am	95	22.000 m	226.000	0.0570	0.0434	0.0409
			285.000	0.2300		
247 Cm	96	1.561E+07 y	278.000	0.0340	0.1771	0.1493
			287.500	0.0200		
			346.000	0.0130		
			402.400	0.7200		
247 Bk	97	1380.945 y	84.000	0.4000	0.0588	0.0566
			265.000	0.3000		
249 Cm	96	64.150 m	368.760	0.0035	0.0101	0.0075
			560.390	0.0084		
			621.870	0.0018		
			634.310	0.0150		
			652.800	0.0014		
249 Cf	98	350.840 y	54.730	0.0022	0.1819	0.1573
			92.300	0.0030		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
249 Cf	98	350.840 y	241.200	0.0022	0.1819	0.1573
			252.880	0.0273		
			266.730	0.0075		
			295.840	0.0014		
			333.440	0.1550		
			387.950	0.6600		
			720.000	0.0014		
249 Es	99	1.700 h	62.470	0.0013	0.1673	0.1352
			144.990	0.0018		
			191.600	0.0040		
			234.600	0.0026		
			255.000	0.0011		
			298.000	0.0056		
			370.100	0.0014		
			375.100	0.0330		
			379.500	0.4040		
			437.600	0.0075		
			565.000	0.0021		
			625.300	0.0013		
			628.500	0.0021		
			668.300	0.0024		
			789.700	0.0114		
			813.200	0.0910		
			852.200	0.0087		
			945.400	0.0024		
			1007.900	0.0073		
			1218.500	0.0150		
250 Bk	97	3.222 h	98.200	0.0012	0.4796	0.3499
			889.980	0.0164		
			929.280	0.0137		
			988.960	0.4510		
			1028.580	0.0439		
			1031.760	0.3510		
250 Es	99	2.100 h	989.000	0.1630	0.1641	0.1197
			1032.000	0.1360		
251 Cf	98	898.615 y	61.500	0.0056	0.0289	0.0275
			68.000	0.0020		
			73.000	0.0030		
			83.000	0.0010		
			135.000	0.0010		
			144.000	0.0010		
			154.000	0.0020		
			176.600	0.1770		
			214.000	0.0020		
			227.000	0.0630		
			255.000	0.0020		
			262.000	0.0020		
			266.000	0.0050		
			270.000	0.0020		
			285.000	0.0140		
			291.000	0.0040		
251 Es	99	1.375 d	152.700	0.0091	0.0028	0.0028
			177.600	0.0239		

Nuclide	Z	Half Life	Energy keV	Yield	Γ R*m2/h/Ci	T Rem/h/Ci
252 Cf	98	2.640 y	52.320	0.0030	0.0014	0.0013
			54.420	0.0023		
			70.650	0.0013		
			377.400	0.0013		
			399.700	0.0013		
			418.500	0.0023		
252 Es	99	550.000 d	102.330	0.0170	0.1151	0.0366
			106.020	0.0013		
			139.030	0.1270		
			165.000	0.0013		
			694.000	0.0042		
			715.800	0.0079		
			759.100	0.0047		
			765.300	0.0017		
			785.100	0.1680		
			800.000	0.0137		
			804.800	0.0036		
			818.100	0.0068		
			821.800	0.0032		
			924.100	0.0220		
254 Cf	98	60.500 d	34.400	0.3000	0.0652	0.0345
			42.600	1.0000		
			63.000	0.0200		
			69.700	0.0100		
			70.400	0.0300		
			80.800	0.0100		
			85.100	0.0100		
			316.000	0.0015		
254 Es	99	1.638 d	104.360	0.0018	0.2588	0.1892
			544.460	0.0028		
			584.320	0.0280		
			648.800	0.2800		
			688.680	0.1200		
			693.780	0.2400		
255 Es	99	39.800 d	57.902	0.0011	0.0007	0.0007
			58.477	0.0067		
			60.004	0.0012		
			80.920	0.0027		
			81.477	0.0081		
255 No	102	3.100 m	187.200	0.0550	0.0053	0.0051
256 Lr	103	31.000 s	103.700	0.0075	0.0160	0.0149
			179.700	0.0640		
			241.400	0.0750		

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Title and author(s)

Table of Exposure Rate Constants and Dose Equivalent Rate Constants

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Department or group
Health Physics Dept.

Group's own registration number(s)

pages + tables + illustrations

Abstract

The exposure rate constant Γ is calculated and tabulated for 1084 nuclides. The exposure rate constant is defined as the ratio of the product of the exposure rate and the square of the distance from a radioactive point source to the source strength Q.

The dose equivalent rate constant Τ is here defined as the ratio of the mean dose equivalent rate to a water cylinder fo 30 cm diameter and 100 cm height placed 100 cm from a radioactive source to the source strength Q. The source is placed at the midplane of the cylinder. The dimensions of the cylinder were chosen to approximate a human phantom of 70 kg mass. The dose equivalent rate constant is calculated and tabulated for 1084 nuclides. For both quantities, Γ and Τ, the contributions from photon energies below 30 keV and X-rays are omitted.

The data are based on the Evaluated Nuclear Structure Data File, which is compiled by The Nuclear Group at Oak Ridge National Laboratory.

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